

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Public Access Theses, Dissertations, and
Student Research from the College of
Education and Human Sciences

Education and Human Sciences, College of
(CEHS)

12-2020

The Role of Faculty in Fostering Psychosocial Wellbeing Among University Students

Kelley Wick

University of Nebraska-Lincoln, kwick2@huskers.unl.edu

Follow this and additional works at: <https://digitalcommons.unl.edu/cehsdiss>



Part of the [Adult and Continuing Education Commons](#), [Community College Leadership Commons](#), [Community Psychology Commons](#), [Developmental Psychology Commons](#), [Educational Psychology Commons](#), [Health Psychology Commons](#), [Other Education Commons](#), [Scholarship of Teaching and Learning Commons](#), and the [Social Psychology Commons](#)

Wick, Kelley, "The Role of Faculty in Fostering Psychosocial Wellbeing Among University Students" (2020). *Public Access Theses, Dissertations, and Student Research from the College of Education and Human Sciences*. 387.

<https://digitalcommons.unl.edu/cehsdiss/387>

This Article is brought to you for free and open access by the Education and Human Sciences, College of (CEHS) at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Public Access Theses, Dissertations, and Student Research from the College of Education and Human Sciences by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

**THE ROLE OF FACULTY IN FOSTERING PSYCHOSOCIAL WELLBEING
AMONG UNIVERSITY STUDENTS**

by

Kelley M. Wick

A THESIS

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Master of Arts

Major: Educational Psychology

Under the Supervision of Professor Caron A.C. Clark

Lincoln, Nebraska

December 2020

THE ROLE OF FACULTY IN FOSTERING PSYCHOSOCIAL WELLBEING AMONG UNIVERSITY STUDENTS

Kelley M. Wick, M.A.

University of Nebraska, 2020

Advisor: Caron A.C. Clark

The transition to college represents a major life event, and successfully navigating this shift has implications for students' psychosocial wellbeing. While there is ample support for the idea that social relationships can facilitate student wellbeing during the transition to college, there is limited understanding of the unique role faculty may play in supporting students. The aim of this study was to determine the relation of faculty support to student wellbeing and self-efficacy, independent of peer support and student level of stress. Additionally, the primary questions were to examine whether self-efficacy mediated the relation of faculty support to student wellbeing, and whether faculty support buffered the impact of stress to student wellbeing. Participants included 147 undergraduate students ($M_{\text{age}} = 23.14$, 69.4% female) from a Midwestern university, who completed a series of surveys assessing their levels of support in belonging on campus, their subjective happiness, self-efficacy, resilience, grit, and stress. Faculty support showed a robust correlation with a composite measure of psychosocial wellbeing incorporating happiness, resilience and grit. Importantly, this relation was independent of peer support and student level of self-perceived stress, $p < .001$, $R^2 = .170$. Additionally, there was support for a mediated relationship from faculty support to student wellbeing via self-efficacy, $p < .001$. While student stress and faculty support were independently

associated with student wellbeing, there was no evidence for an interaction between the two. That is, faculty support was equivalently associated with student wellbeing regardless of how much stress students felt they were experiencing. These results highlight the independent critical role of faculty in supporting student wellbeing during this major life transition. Interventions to promote faculty support may serve as a promising means of facilitating student adjustment on their university campuses.

Keywords: psychosocial wellbeing, faculty support, self-efficacy, college transition, student retention

Author's Acknowledgements

This project was a labor of love spanning over two years and two institutions. I am fortunate to have been surrounded by an incredible support network, and I would like to take the time to express my sincere gratitude towards those that helped me along the way. Thank you to the people who kept me laughing, offered invaluable encouragement when the process was difficult, walked with me on one of 4,357 coffee runs, Skyped, Zoomed, texted, and called me throughout this entire journey– Alycia Asai, Jessica Alcaraz-Bigelow, Samantha Kesselring, Linnea Swanson, Taylor Morris, Christine Klinghoffer, Jamie Carmen, Juliette Wheeler, Alice Roberti, and Pamela Wagner. Thanks also to my amazing family for supporting my return to college and helping to support me along the way – my parents, Jerry and Joanne Wick, my sister-in-law, Ashley Engler-Shepherd, and my niece and nephew, Kayley and Deklen Shepherd. Special thanks to my brother, Ryan Shepherd, who always encouraged me to someday return to school.

I would like to thank my research partners for Study 1, Tyler Stevenson and Ellice Ramm. Tyler, thank you for allowing me to drag you along when I first came up with the idea of studying belonging and wellbeing in university students, and putting up with me through three statistics and methods courses. Ellice, thank you for jumping in and helping to support my learning of statistics. You helped me to understand that statistics can, in fact, be fun. I would also like to thank Brandon Ee, Cara White, and Diedre Waite for their contributions to setting up the Qualtrics surveys that would be the basis for Study 2. I am so grateful for you and all the hard work you put into getting Study 2 off the ground.

This thesis would not have been possible without my amazing mentors, and I cannot put into words the depth of my gratitude for their guidance and encouragement on what has been a

long and winding path through my education. The impact that faculty members have had on my life has been profound, and it is through them that this project came to be.

At my undergraduate institution of California State University, Sacramento, I would like to thank Dr. De-Laine Cyrenne, whose kindness and patience allowed me to see that I could be good at math after a lifetime of feeling as though I could not. Thank you to Dr. Lawrence Meyers, who solidified my love for conducting research, and to Dr. Melissa McTernan who taught me the value of teaching it to others in a way that instills understanding and confidence. I also wish to thank Dr. Casey Knifsend, who showed me a path that I didn't know existed in developmental psychology, and being the first person to urge me to think about graduate school as a real possibility. I never would have had the courage to begin this journey without your encouragement. Thank you, Casey, for also being a wonderful friend.

One of the most impactful people on my life has been someone who began as an undergraduate advisor and mentor, but has evolved into one of my best friends – Dr. Alexandra Morrison. Saying 'thank you' seems so inadequate for the role you have played in my education and growth. You inspire me to not only be a better scientist, but a better person each day, and I am unbelievably grateful for having you in my life.

I am so thankful to have been welcomed into the Empowerment Initiative Lab, and my fellow members consistently remind me why I chose to come to the University of Nebraska-Lincoln. My lab mates are some of the brightest individuals I've ever had the pleasure of working with, and I have been deeply impacted by your friendship, encouragement, and commitment to contributing to a kinder, braver world. Thank you to our leader and one of my greatest mentors, Dr. Susan Swearer, for her unending kindness, passion, and incredible expertise. I would not be here without her, and I am grateful beyond words for her.

Finally, I want to thank my extraordinary graduate advisor, Dr. Caron Clark. My introduction into the graduate school experience did not begin as expected, and I found myself without an advisor weeks before moving to Nebraska from California. Dr. Clark took me on without meeting me, and I am brimming with gratitude at the serendipity that brought me to her. I am in awe of her brilliance and depth of knowledge. She pushes me to grow, unendingly supports my enthusiasm towards research, and I am humbled that I get the chance to work with her each day.

For Kayley and Deklen

“We’re here for a reason. I believe a bit of the reason is to throw little torches out to lead people through the dark.”

– Whoopi Goldberg

Table of Contents

I.	Title Page	i
II.	Abstract	ii
III.	Author's Acknowledgements	iv
IV.	Table of Contents	viii
	a. Tables	xi
	b. Figures	xii
V.	Chapter I: Introduction	1
	a. Prior Study on Belonging, Subjective Happiness, & Self-Efficacy	5
	b. Purpose of the Present Study	6
VI.	Chapter II: Literature Review	8
	a. Student Wellbeing	8
	b. Ability to Overcome Adversity as an Important Component of Student Wellbeing	10
	c. Social Support	12
	d. Self-Efficacy	15
	e. General Summary & Limitations of the Literature	17
VII.	Chapter III: Methods	18
	a. Participants	18
	b. Procedure	19
	c. Materials	20
	i. Subjective Happiness Scale	20
	ii. Revised Sense of Belonging Scale	20

iii.	Self-Efficacy Questionnaire	21
iv.	12-Item Grit Scale	22
v.	Resilience Scale	22
vi.	Modified Stressor Scale for College Students	22
d.	Statistical Methods	24
e.	Power Analysis	26
VIII.	Chapter IV: Results	26
a.	Sample Characteristics	26
b.	Data Reduction	26
c.	Research Question 1	27
d.	Research Question 2	28
e.	Research Question 3	29
f.	Model Fit	30
IX.	Chapter V: Discussion	31
a.	Psychosocial Wellbeing as a Construct	31
b.	The Relation of Faculty Support to Wellbeing	32
c.	The Mediating Role of Self-Efficacy	33
d.	The Impact of Stress on Student Wellbeing	34
e.	Limitations & Directions for Further Research	35
f.	Conclusion	36
X.	References	39
XI.	Tables	51
XII.	Figures	58

XI. Appendices	64
a. Appendix A: Institutional Review Board Approval Letter	64
b. Appendix B: Demographics Form	65
c. Appendix C: Subjective Happiness Scale.....	66
d. Appendix D: Revised Sense of Belonging Scale	67
e. Appendix E: Self-Efficacy Questionnaire	69
f. Appendix F: 12-Item Grit Scale	70
g. Appendix G: Resilience Scale	71
h. Appendix H: Modified Stressor Scale for College Students	73

Tables

Table 1.	Descriptive Statistics and Tests of Normality	51
Table 2.	Correlation Analysis	52
Table 3.	Exploratory Factor Analysis	53
Table 4.	Hierarchical Linear Regression Predicting Wellbeing	55
Table 5.	Hierarchical Linear Regression Predicting Self-Efficacy	56
Table 6.	Linear Regression Predicting Wellbeing from Centered Interaction	57

Figures

Figure 1. Bronfenbrenner's Ecological Systems Theory	58
Figure 2. Power Analysis	59
Figure 3. Exploratory Factor Analysis Eigenvalues	60
Figure 4. SEM of Full Mediation by Self-Efficacy	61
Figure 5. SEM Predicting Psychosocial Wellbeing	62
Figure 6. Interaction of Wellbeing and Stress by Level of Faculty Support	63

CHAPTER I

Introduction

Wellbeing is not a list of boxes to check off and may not come from a catalog of objectives carefully cultivated to illustrate what should be done in order to have what may constitute a ‘good’ life. Arguably, it is far more complex than that, encompassing abstract concepts such as happiness and connection (Maccagnan et al., 2018; Renshaw & Bolognino, 2016; Williams et al., 2017). Other factors, such as resilience and grit, may also play a critical role. Resilience is the ability to come back from life’s hardships, and the capacity to recover quickly (Hartley, 2011; Shakir et al., 2020; Turner & Cohen, 1996). While resilience is the power to face and transcend failure in a more acute sense, grit is illustrated by showing strength of character and courage in the longer-term. While psychological wellbeing can be defined in a number of ways (Binfet, 2017; Renshaw & Bolognino, 2016; Williams et al., 2017), this thesis will define wellbeing as a balance of positive state of mind, happiness, resilience, and grit.

Regardless of how it is defined, wellbeing is a central component to health and is linked to multiple positive outcomes (Walton & Cohen, 2011). In a comprehensive evaluation of wellbeing and its connection with other positive outcomes, Maccagnan and colleagues (2018) argue that it is important to look past simply the intrinsic value, or the direct benefits of increased wellbeing, and to explore its’ subjective value in order to understand the indirect benefits as well. The directionality of wellbeing to health benefits is complicated, likely reciprocal in nature, and has also been tied to overall life satisfaction in the literature (Hoffman et al., 2003; Maccagnan et al., 2018; Walton & Cohen, 2011). While examining the indirect benefits of wellbeing, findings from previous studies have indicated that positive wellbeing can lead to increased life satisfaction, and those with positive life satisfaction are more likely to lead healthier lifestyles.

Further, these subjective benefits show individuals with high life satisfaction also tend not to smoke, eat healthier food, and engage in more physical exercise (Maccagnan et al., 2018). Physiologically, those with higher levels of wellbeing and life satisfaction also tend to have lower cortisol levels, as well as better neuroendocrine, inflammatory, and cardiovascular responses, which may help to buffer against illnesses throughout the lifespan (Maccagnan et al., 2018). Because wellbeing encompasses concepts like resilience and grit, it has also been linked to better adjustment outcomes when individuals are confronting novel circumstances or settings (Walton & Cohen, 2011). When individuals feel as if they can adjust to uncertainty quickly and adapt to new environments, it can allow them more confidence to pursue their goals in the face of adversity. This is especially important during the developmental transition to university.

The transition to college from high school is regarded as one of the most momentous periods of change for young people in western society, especially as it coincides with the developmental upheaval from late adolescence into emerging adulthood. Emerging adulthood is characterized as a relatively novel developmental stage that has come to fruition in approximately the last sixty years in industrialized and typically western societies (Arnett Jensen, 2011). In previous generations, individuals may have moved from late adolescence directly into early adulthood, and the shift away from that model has come largely due to the rising importance placed on higher education in western societies. In the 1950s and 1960s in the United States, for example, societal roles were markedly different than they are presently, with just 12.5% of adults having earned a four-year college degree in 1950. This is noticeably different from the 69.9% in 2018 (<https://www.census.gov>). Perhaps this increase in college attendance and graduation rates can partially explain the addition of emerging adulthood as a recognized developmental stage. While it should be acknowledged that there are marked cultural differences

in expectations associated with emerging adulthood, Lene Arnett Jensen (2004), who coined this phrase, considers emerging adulthood to be unique from both adolescence and early adulthood, and refers to this stage as one of self-focus, instability, and identity exploration. The transition to college or university is often thought of in much the same way; it is seen as a time for exploration of oneself and of potential future careers.

There are many factors that contribute to an individual's positive adjustment and future success during this transition to a novel college atmosphere. Prior research has indicated that students' increased sense of connection or belonging in higher education correlate with both positive overall wellbeing and increased levels of success (Meeuwisse et al., 2010). When students feel as if they belong in their new environment, they may feel that they are part of something greater than their individual experiences, that they are not alone, and that they matter. Connection and sense of belonging can be measured by how students interact within their university settings, including perceived peer support, isolation from others, how comfortable they are in their classroom settings, and the support they receive from their faculty (Hoffman et al., 2003). Sense of belonging is therefore tied to wellbeing.

Several studies have examined the transition to college through the lens of success, as defined primarily by academic grades or graduation rates. There has been relatively less attention to wellbeing as a holistic construct that encompasses other markers, including happiness and resilience in the face of setback. Success, arguably, is highly individualized; what constitutes success to one individual may not do so for another. Additionally, many of the studies have not considered the diverse backgrounds that students come to their universities with such as race, ethnicity, first-generation status, LGBTQIA+ community membership, cultural background, and socioeconomic status, to name a few. These factors likely contribute to a students' complex

sense of self as they navigate the transition to university. Students bring in a myriad of life experiences that are unique, and these individual differences shape their opinions about their own ability to succeed in their college courses and future careers. Further, these feelings can have impact on their positive wellbeing and mental health (Hartley, 2011; Stebleton et al., 2014).

Holistically, human connection also plays a pivotal role in overall wellness and how one sees the world. Social support has been found to be one of the most powerful protective factors during both the transition process to college as well as the ability to fulfill requirements for degree programs (Coffman & Gilligan, 2002). Social support networks are able to offer positive feedback, encouragement, and stability for individuals, and may also act as a buffer against stress (Coffman & Gilligan, 2002; Towbes & Cohen, 1996). Students are frequently met with a variety of stressors as they begin to navigate university life, and stress could be related to family or friends, school, jobs, extracurricular activities, and general feelings of fulfillment (Knifsend, 2018; Ota et al., 2016; Towbes, & Cohen, 1996). Higher levels of stress could also result in feelings of disconnection and lack of belongingness, which, in turn, can lead to poor mental health and reduced overall wellbeing.

While a large number of previous studies have focused on student wellbeing has explored the impact of social support (Baker, 2013; Coffman & Gilligan, 2002; Friedlander et al., 2007; Hale et al., 2007; Jairam & Kahl, 2012; Towbes & Cohen, 1996), it has been defined primarily by the influence of peer and familial support on individuals. However, less is known about whether and how other types of support are able to make a unique contribution to student wellbeing, such as that from an academic mentor or faculty member.

There is evidence to support that faculty interaction could be a crucial factor in students' sense of connection to their campus. Positive perceived campus climate, which includes faculty

involvement, has shown to have a positive effect on both self-identification and their self-efficacy, a person's belief in their own capabilities to succeed (Baker, 2003; Hale et al., 2007; Ryzin et al., 2009). Self-efficacy can influence all aspects of an individual's sense of self. Faculty interaction has also shown a positive impact on sense of belonging, social involvement, and students' ability to find deeper meaning in their college experiences (Baker-Eveleth et al., 2011). Self-efficacy plays a key role in how we perceive ourselves. Those with stronger senses of self-efficacy tend to invest themselves deeper into their work, persist longer through challenges, and have the confidence to set and achieve loftier aspirations (Chemers et al., 2001; Gore, 2006, Haycock et al., 1998). Self-efficacy also promotes positive wellbeing among college students and has been linked with lower levels of stress and depression (Sim & Moon, 2015). Theoretically, then, role that faculty may play in assisting students in believing in themselves is paramount; faculty may have the capacity to help students feel capable, and that can have a powerful influence on their lives. That is, self-efficacy may mediate the relation of faculty support to student wellbeing. Despite clear and consistent evidence for the link between college student self-efficacy and wellbeing, as well as a clear theoretical backdrop for the importance of faculty in supporting this wellbeing and helping students to overcome stress, there has been little research to examine these potential links. We can infer from these findings that the learning climate a faculty member creates is important to student feelings of happiness, support, and sense of belonging, which may lead to increased overall levels of psychosocial wellbeing (Ryzin et al., 2009).

Prior Study on Belonging, Subjective Happiness, & Self-Efficacy

The current study was preceded by one conducted at an ethnically diverse (30.9% Latinx, 26% White, 20.7% Asian, 5.9% Black/African American, 83% 3-year retention rate) university

in the Western United States, which looked at what factors may predict a more general sense of belonging (Wick et al., 2020; Wick et al., 2019). Undergraduate participants completed an online survey consisting of measures that were later used in the current study: subjective happiness (Lyubumirsky & Lepper, 1999), self-efficacy (Gaumer-Erickson, et al., 2016), grit (Duckworth, et al., 2017), resilience (Wagnild, 2009), stress (Ota, et al., 2016), and sense of belonging (Hoffman, et al., 2002). Sense of belonging was comprised of four subscales including peer support, perceived isolation, classroom climate, and faculty support. Results from this study indicated that resilience was the strongest predictor of belonging, particularly when mediated by self-efficacy and subjective happiness. These results suggest that self-efficacy may play a key role in how resilience affects belongingness (Sim & Moon, 2015). This may be related to the finding that individual's capacity to recover from difficulties and general mental toughness leads to an individuals' belief in their own capacity for success. Exploratory multiple regression analysis also suggested that support from faculty was the strongest predictor of students' subjective happiness, which is also supported by previous studies (Komarraju & Bhattacharya, 2010; Umbach & Wawrzynski, 2005). These results were the foundation on which the current study was built.

Purpose of the Present Study

In summary, the transition to college is a momentous life event with important implications for wellbeing. While it is clear that social support systems and self-efficacy both facilitate healthy adjustment and wellbeing during this transition, far less is known about the role of faculty support in helping students to manage this transition and cope with the stressors of university life. A better understanding of these links has clear implications for intervention: by understanding the role of faculty in student self-efficacy and wellbeing, we might develop more

effective programs to enhance these student outcomes. As such, the aim of this study is to evaluate the relation of faculty support to college student wellbeing, conceptualized as happiness, resilience, and grit. Additionally, this thesis will explore the impact of faculty support on other aspects of a student's university experience such as their self-efficacy, or their belief in their own ability to succeed in their academic path, and whether faculty support may have a buffering effect on negative outcomes in wellbeing due to stress. This thesis has three primary research questions:

- 1. Does faculty support correlate with student wellbeing and self-efficacy, independent of peer support and stress?*
- 2. Does self-efficacy mediate the relation of faculty support to student wellbeing?*
- 3. Does faculty support buffer the relation of stress to student wellbeing?*

The conceptual model that will be tested is that student psychosocial wellbeing is comprised of various factors. The main hypothesis is that while social support is vital to wellbeing, the supportive role of educators offers unique contribution, and that faculty support is able to both buffer the negative effects of stress and also increase students' self-efficacy, which will also positively impact wellbeing.

CHAPTER II

Literature Review

Student Wellbeing

In recent years, a greater focus has been brought upon the general health and wellbeing of students on college campuses, especially in how these factors might be linked to better learning outcomes, increased academic performance, and student retention. As evidence for this, college websites advertise both academic advising and mental health services for students. In 2018, retention of first-year students to their sophomore year at University of Nebraska-Lincoln was just 82.2% (<http://www.unl.edu>). While this may seem high in comparison to the national average of 72%, it indicates that of the incoming class of 25,820, approximately 4,596 did not return to UNL after they completed their first year at the university. University attrition disproportionately affects first-generation college students, those with lower socioeconomic status, people of color, and marginalized groups (Gore, 2006; Longwell-Grice & Longwell-Grice, 2007; Thomas, 2002). Finding ways to support students' wellbeing through the transition to college is critical to mitigating attrition and promoting a socially just and economically healthy society.

Wellbeing encompasses far more than the physicality of a student, but offers a more comprehensive view of what it means to be human. While physical wellness is important, psychosocial wellbeing is a broader concept, taking in factors such as financial stability, emotional wellness, and positive mental health among other considerations (Ryff, 1989; Diener, 2009). Taking mental and psychosocial wellbeing into consideration allows for a framework that does not just view wellbeing in the physiological sense, or even just as a measure of happiness

(Bowman, 2010; Diener et al., 2009), but lends itself to a more holistic view of overall wellbeing.

The conceptual framework for psychosocial wellbeing, originally proposed by Ryff (1989), is based on the idea that it is crucial for living life in a way that is meaningful and fulfilling. Psychosocial wellbeing, arguably, has far-reaching implications for later life outcomes, such as how one may interact with their world, their relationships with others, their life satisfaction, and their self-efficacy (Bowman, 2010). Ryff's model is one of the first to bring to light the idea that wellbeing is multi-faceted and has several dimensions, such as happiness, positive relations with others, and life satisfaction, that work together to help provide a rich life experience (Bowman, 2010).

Research by Diener et al. (2009) also supports these claims, indicating that wellbeing is comprised of a multitude of separate components that are interrelated. Wellbeing cannot be understood by looking at these individual factors, but by looking at how those factors are connected and influence one another (Diener et al., 2009). Additionally, another comprehensive study of college climate and student health and wellbeing by Ridner et al. (2015) indicated that positive academic achievement outcomes were predicted by a variety of factors such as physical activity, depression, receiving mental health services, and sleep quality.

Accounting for the intricate components that construct psychosocial wellbeing, it is vital to consider the implications of poor levels of wellbeing on the academic sphere. For instance, in considering financial stability, Haskett et al. (2020) argues that there is a long history of assuming that those who have the means to enroll in college are economically privileged. This has been shown to be fundamentally untrue when analyzing the makeup of students attending university. In a study conducted by Gore in 2006, it was found that 36% of students at 35 four-

year institutions had experienced food insecurity, and 9% had experienced homelessness within the last 12 months. When students struggle to have their basic needs met in safe housing and enough food to sustain themselves, inequity suddenly becomes clear in academic outcomes. When students are unable to find a safe place to sleep, they go into their classrooms academically behind their peers. This may lead to an increase in attendance issues, which often triggers or proceeds to a cascade of other negative outcomes. Previous studies have indicated that these factors have a significant impact on lower grade point averages (Gore, 2006; Haskett et al., 2020). Many universities have provided outlets for the physical wellbeing of their students with access to gym memberships, nutrition coaching, and access to sports and classes. However, there is still work to be done to support students in their mental health and self-care principles. In summary, definitions of wellbeing vary, incorporating financial, mental, and physical wellbeing. Despite the complexity of defining wellbeing, studies do suggest a link between student wellbeing and academic performance and retention.

Ability to Overcome Adversity as an Important Component of Student Wellbeing

In order for a student to deal with academic and social difficulties, they must show a certain amount of flexibility and mental toughness. Resilience, while a relatively new construct in the literature, can be recognized as a concept to understand why some individuals are able to come back from life's adversities, and have the capacity to recover quickly under stress (Connor & Davidson, 2003; Hartley, 2011). It has also been defined as a process and a personality trait that is assisted by individual characteristics, social support, and family congruence (Scoloveno, 2017). This trait can be promoted through better social support, and has shown to be useful for coping with the demands of college life (Allbuhassan & Bates, 2015; Steinhardt & Dolbier, 2008; Turner et al., 1996)

Hartley (2011) offers a comprehensive review of the relation of resilience to academic achievement, taking an especially critical eye to the interplay between them as described in Tinto's (1975) theory of student departure. This theory recognizes that students already arrive at their universities with characteristics that will play a role in how they interact with their academic environments. It also explores the role of resilience built through the lifespan, and how resilience relates to academic and social integration. Further, Tinto examines how this complex interplay affects student retention (Tinto, 1975; Tinto, 1993). The key role of resilience as stated in the literature is to influence an individual's ability to adjust to a new environment, and the difficulties students face are comprised of their failure to adjust to university (Turner, et al., 2016; Wolff, 1995). Hartley (2011) found that self-reported resilience at the start of the academic year was positively correlated with retention at the end of the academic year in a sample of undergraduate students in the health sciences.

While resilience is the ability to face and overcome failure in a more acute sense, grit is about showing strength of character and continued courage in the face of hardship over the long term. Grit entails working strenuously towards challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress (Duckworth et al., 2007). In a recent 2020 study, Shakir and colleagues found that higher levels of grit and resilience were associated with lower levels of student burnout, even while accounting for stress. This may indicate that regardless of the levels of stress to a student, those with higher levels of resilience are able to manage their stressors in a more positive way, leading to higher rates of retention.

Students are often met with many stressors as they begin to navigate university life, and resilience and grit could be key in understanding how they are able to manage. In university students, stress could be related to family, friends, school, jobs, extracurricular activities, or

general feelings of fulfillment (Knifsend, 2018; Ota, et al., 2016; Towbes, & Cohen, 1996).

There is evidence to suggest that students experience significant levels of stress, though Robotham and Julian (2006) argue that stress does not necessarily need to have a negative connotation, but that a certain level of stress is vital for functioning or responding accurately in emergency situations. This thesis, however, will be addressing the types of stress that result in negative outcomes for individuals in university settings (any references to support this association?), and the effect that stress has on their general psychosocial wellbeing. In doing so, resilience and grit are conceptualized as central markers of wellbeing that enable students to overcome these stressors and further their academic progress.

Social Support

In the present study, I take an ecological approach influenced by Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1974). This model emphasizes the contextual role of how an individual's environment interacts and influences how they grow and develop over the course of the lifespan. Bronfenbrenner argues that individuals are constantly interacting with a series of interconnected, ecological systems in which they are embedded. This theory suggests that an individual is part of a microsystem made up of their immediate environment and those they interact with every day. Microsystems include the individual, the home, family members that they live with, and close peers or community members. The microsystem is nested within the mesosystem, which may include extended family members, school environment, peer groups, and other community members that the individual may interact directly with, but perhaps not at the frequency of those in the microsystem. The mesosystem is then nested within the exosystem, which encompasses the indirect environment and may include components that the individual may not have direct exposure to, but may still have an indirect influence. The exosystem can

contain school districts, parental workplaces, or neighborhoods. The final two components described in the Ecological Systems Theory are the macrosystem, which encompasses more abstract concepts such as culture and values, and the chronosystem, which adds the dimension of time to these interconnecting systems and how they influence the individual over the course of the lifespan. The objective of the Ecological Systems Theory is to demonstrate how no individual develops in a vacuum, but instead is a result of the complex interplay of the environment in which they are immersed (See Figure 1).

In terms of the microsystem and its role in the transition to college, social support is one of the most well-examined factors in student wellbeing. Students strive to feel connected to their peers by joining clubs or honor societies, participating in extracurricular activities, or forming study groups. In a 2005 study, Dennis and colleagues found that when examining the impact that familial support and peer support have on positive outcomes for university students, peer support appears to be important to adjustment to university for individuals. While familial or parental support was also shown to be vital, the results suggest that individuals rely heavily on their peers in their initial social adjustment, while familial support was beneficial for emotional support based on collected survey data. In another study by Reeve and colleagues in 2003 on undergraduate nursing students, mixed-method results indicated that students sought out peers for support at a higher frequency than their families, significant others, or faculty members. While the literature does address the impact the social support network in helping students both adjust and succeed at their universities, only some of the components of this larger construct have been studied at length. Both peer support (Dennis et al., 2005; Milo & Schuldiner, 2009; Reeve et al., 2013) and familial support (Holahan et al., 1994; Kim & Schneider, 2005; Mounts

et al., 2006) have been thoroughly examined, but there is little in the literature regarding how support from faculty members may impact a students' academic trajectory and wellbeing. Faculty support has shown to have a positive effect on a students' health, and the perceived campus climate has a positive effect on self-identification and self-concept (Shelton, 2003; Umbach & Wawryznski, 2005). Faculty support has been associated with psychosocial wellbeing, social involvement, and a students' ability to find deeper meaning in their college experiences (Baker-Eveleth et al., 2011; Bennett & Gilbert, 2009; Komarraju et al., 2010; Linley et al., 2016; Shelton, 2003; Umbach & Wawrzynski, 2005). We can infer from these findings that the learning climate that a faculty member creates is important to student feelings of happiness, support, and wellbeing. Other reports in the literature have shown that higher levels of social engagement in learning climates contribute to increased perceptions of academic autonomy and teacher-related support over time, which, in turn, may create a positive feedback loop that contributes to the overall feeling of connection to campus (Ryzin et al., 2009). Relatedly, a higher sense of connection on college campuses has been linked to both improved academic performance and improved health benefits for students (Walton & Cohen, 2011).

When examining the connection of faculty support and student wellbeing with regards to retention, little literature appears to be available. Shelton (2003) found that increased faculty support was positively correlated with the retention of nursing students, Williamson and colleagues (2014) showed a correlation between undergraduate student wellbeing and faculty advising, and finally, a third by Posselt (2017) made the argument that faculty support was key to doctoral students' persistence through their programs.

In a dual-data set study, Umbach and colleagues (2005) found that students reported higher sense of purpose, more connection to campus, higher levels of engagement, and stronger

academic achievement when they had high levels of faculty support when compared with those who stated they did not. Other studies have indicated similar results, finding that higher levels of faculty involvement predicted higher levels of student academic achievement, self-efficacy, and psychosocial wellbeing (Baier, et al., 2016; Coffman & Gilligan, 2002; Choi, 2005). In summary, social support has been indicated as a vital component for student wellbeing and academic retention, but little research has been conducted to disentangle the unique contribution that faculty can make.

Self-Efficacy

One of the ways in which faculty may have a significant impact on students is through their coaching, guidance and modeling, which may help to bolster a student's sense of self-efficacy (Coffman & Gilligan, 2002; Gore, 2006; Vuong et al., 2010). Because wellbeing and self-efficacy are interconnected and circular in nature, higher self-efficacy may also influence positive outcomes in psychosocial wellbeing as well (Diener et al., 2009; Goldrick-Rab et al., 2018; Ridner et al, 2015). In Bandura's original learning theory model, self-efficacy was defined as an individual's ability to organize and act upon the management of situations (Bandura, 1977). In recent literature, self-efficacy has been more often referred to as an individual's perception of their own capabilities to achieve their personal goals (Bruning et al., 2011; Choi, 2005; Coffman & Gilligan, 2002; Gore, 2006). Thus, self-efficacy is the combination of not only possessing the skills to be successful, but also the self-belief to have the courage to begin and persist towards success. Self-efficacy is a well-researched, multidimensional construct, especially in an academic setting as it pertains to college students and their achievements (Gore, 2006; Zaracova et al., 2005). Self-efficacy in academic terms is conceptualized more specifically as students' beliefs in their own capacity for success, and the confidence they feel in their capability of

completing the academic tasks that they begin (Honicke & Broadbent, 2016; Vuong et al., 2010). Further, Bruning and colleagues (2011) remark that self-efficacy is especially important in educational psychology and academic settings, as it relates to success among many different measures. This also connects directly to Bandura's Self-Regulated Learning Theory, as self-efficacy can be the guide for a students' ability to have control over their own learning environment (Bruning et al., 2011).

The adjustment to college or university can have a critical impact on a students' self-concept and later academic success outcomes (Bowman et al., 2018). Conceptually, self-efficacy in this context relates to a students' belief in their own abilities in a college setting. Much of the literature has explored the connection between a students' self-efficacy and their academic success outcomes including higher grades and more positive feelings towards their institution (Zajacova, 2005). For example, Chemers and colleagues (2001) examined the longitudinal relations of self-efficacy to student academic performance, stress, health, and resilience in commitment to finishing degree programs. In this work, positive self-efficacy was strongly linked with lower levels of stress, as well as stronger commitment to finishing school. This research therefore provides strong support for a link between self-efficacy and student resilience and grit. Academic self-efficacy and its impact on academic performance has also been well-researched. Self-efficacy has been shown to be a strong predictor of academic performance and grade-point average in multiple previous studies (Choi, 2005; Vuong et al., 2010; Zaracova et al., 2005). Higher levels of self-efficacy have been correlated with increased levels of general wellbeing and lower levels of stress and depression among college students (Sim & Moon, 2015). In a study conducted by Vuong and colleagues (2010), self-efficacy was shown to act as a buffer against stress associated with college, especially in minority or protected populations.

Taken together, these studies suggest that self-efficacy is an important factor to consider in relation to student wellbeing and provide support for the idea that one mechanism by which faculty may support student wellbeing is through their encouragement of student self-efficacy.

General Summary & Limitations of the Literature

There are several limitations in the extant research that the current study will address. First, student success has been primarily conceptualized through quantitative metrics such as grade point average and retention rates, but previous research has failed to address the mechanisms that also contribute to success. Student wellbeing has been defined in a myriad of ways, leading to a vague description that often centers on physiological health. This thesis will address this by taking a holistic perspective that incorporates measures of general life satisfaction, subjective happiness, grit, and resilience. While much of the literature suggests that social support plays a crucial role in student wellbeing and retention, previous research has primarily been relegated to peer or familial support. This narrows our understanding of the role that faculty support may play in these factors, and what contribution faculty make to student wellbeing. This thesis examines the unique role of faculty support independent of peer support. Finally, although self-efficacy represents a plausible theoretical link between faculty support and student wellbeing, this connection is understudied. Therefore, this thesis will examine this link to determine whether the relations between faculty support and wellbeing may be influenced by an increase in student self-efficacy.

CHAPTER III

Methods

Participants

Participants consisted of 158 undergraduate students from a university in the midwestern United States, with data collected from October 2019 to April 2020 (Valid $N = 155$; $M_{age} = 20.40$, $SD_{age} = 1.91$). In order to participate, students had to be enrolled at University of Nebraska-Lincoln, at or over the age of majority of 19 in the state of Nebraska. Participants were recruited from the both the educational psychology subject pool and through advertising across campus to recruit a diverse sample of majors. Flyers were posted in buildings across campus and undergraduate advisors were encouraged to share the study opportunity with their advisees, in order to promote participation by students outside of educational psychology.

Three participants who initially consented to the study were omitted for completing less than 10% of survey questions. The remaining sample (67.7% identifying as female, 30.3% identifying as male, 1.3% declined to state, and <1% identifying as transgender, non-binary, genderqueer, agender, or other gender not specified) was 76.1% White, 10.3% Asian, 6.5% reporting two or more ethnic groups, 2.6% unknown, 1.3% declining to state, 1.3% Black or African American, 1.3% Native Hawaiian or Pacific Islander, 0.6% Hispanic or Latinx, and 0% American Indian or Alaska Native. Participants were asked their class standing, and 16.8% reported as first-years (having completed 0-29 college units), 36.1% sophomores (having completed 30 to 59 college units), 20.0% juniors (having completed 60 to 89 college units), 23.9% seniors (having completed more than 90 college units), 1.3% graduate students (having completed a Bachelor's degree) and 1.3% declining to state; 16.8% of participants transferred from either a community college or a four-year institution, while 81.9% stated they began at the

university as first-year students. A question regarding first-generation status was added to the survey in March of 2020, after a large proportion of the sample had already provided data, with 24.6% of participants stating that they were the first in their families to attend university, and 73.9% of participants stating that at least one other member of their family had attended college (Valid $n = 69$).

Procedure

The present study was approved by the Ethics Review Board of University of Nebraska-Lincoln (No. 19760) on October 16th, 2019 (See Appendix A). The age of majority in the state of Nebraska is 19 years old, and as such, a waiver of parent consent was approved for 18-year-olds to participate. All subjects gave their electronic consent or assent to participate in the study and completed the study on their own devices.

The procedure was executed through the Qualtrics online system, which students accessed through an anonymous link or QR code. Participants were instructed to complete six published surveys, presented in random order. After participants indicated that they would participate, they were asked to complete a consent form before continuing, which they read and signed electronically. Participants were asked to answer the questions honestly, and had the ability to either decline to answer any question they chose, or to leave the study at any time. Upon completion of the inventories, participants were asked to answer a series of demographic questions (See Appendix B) before being shown a debrief. Survey data were from Qualtrics and were downloaded to an Excel file. Participants either received all mandatory research credits for an Educational Psychology Course, or they could select to be entered into a drawing for one of two Amazon gift cards worth \$100 each.

Materials

Students completed six published measures in random order, including: the Subjective Happiness Scale (Lyubomirsky & Lepper, 1999), the Revised Sense of Belonging Scale (Hoffman, et al., 2002), the Self-Efficacy Questionnaire (Gaumer-Erickson, et al., 2016), Resilience Scale (Wagnild, 2009), the Modified Stressor Scale for College Students (Ota, et al., 2016), and the Grit Scale (Duckworth, et al., 2007). These measures are described in detail below.

Subjective Happiness Scale

This 4-item inventory was designed to measure the participants' subjective happiness as compared to their peers (See Appendix C). Responses were recorded on a Likert scale of 1 to 7, where 1 represents "not at all" and 7 represents "a great deal" (Lyubomirsky & Lepper, 1999). In previous research (Wick et al, 2020; Wick et al, 2019), the reliability analysis yielded a Cronbach's α of .805; in the current study it was .818, indicating good internal consistency. Moghnie and Kazarian (2011) demonstrated good construct validity for this measure in a college sample using factor analysis, as did Mattei & Schaefer (2004) in an adult sample.

Revised Sense of Belonging Scale

This 26-item inventory was designed to measure sense of belonging in college across four subscales (See Appendix D). Responses were recorded on a Likert scale of 1 to 5, where 1 represents "completely untrue" and 5 represents "completely true" (Hoffman, Richard, Morrow, & Salomone, 2002). In previous research (Wick et al, 2020; Wick et al, 2019), the reliability analysis yielded a Cronbach's α of .913; in the current study it was .913 indicating good internal consistency. Morrow (2012) demonstrated

good construct validity for this measure in a college sample. The scale consists of four subscales, including:

1. **Perceived Peer Support.** Belonging subscale consisting of 8 items, designed to measure sense of belonging amongst campus peer groups. Internal validity analysis resulted in a Cronbach's α of .84.
2. **Perceived Classroom Comfort.** Belonging subscale consisting of 4 items, designed to measure comfort in the classroom sharing ideas and asking questions. Internal validity analysis resulted in a Cronbach's α of .93.
3. **Perceived Isolation.** Belonging subscale consisting of 4 items, designed to measure perception of isolation from peers and campus groups. Internal validity analysis resulted in a Cronbach's α of .84.
4. **Perceived Faculty Support.** Belonging subscale consisting of 10 items, designed to measure comfort with faculty interaction and support. Internal validity analysis resulted in a Cronbach's α of .89.

Self-Efficacy Questionnaire

This 13-item inventory was designed to measure a student's confidence in their ability to achieve specific academic tasks in the context of education (See Appendix E). Responses were recorded on a Likert scale of 1 to 5, where 1 represents "not very like me" and 5 represents "very like me" (Gaumer-Erickson, Soukup, Noonan, & McGurn, 2016). In previous research (Wick et al, 2020; Wick et al, 2019), the reliability analysis yielded a Cronbach's α of .886; in the current study it was .879, indicating a good internal consistency. Bawdon (2019) demonstrated good construct validity for this measure in a college sample using factor analysis.

12-Item Grit Scale

This 12-item inventory was designed to measure grit, courage, resolve, and strength of character (See Appendix F). Responses were recorded on a Likert scale of 1 to 5, where 1 represents “very much like me” and 5 represents “not like me at all” (Duckworth, 2007). In a previous study (Wick et al, 2020; Wick et al, 2019), the reliability analysis yielded a Cronbach’s α of .729; in the current study it was .656 initially. After reliability analysis, item 1 from the scale was excluded, yielding a Cronbach’s alpha of .737, indicating a good internal consistency. This is a widely-used measure (e.g., Abuhassan & Bates, 2015; Datu et al., 2016; Duckworth & Quinn, 2007).

Resilience Scale

This 25-item inventory was designed to measure the capacity to recover quickly from difficulties, in addition to mental toughness (See Appendix G). Responses were recorded on a Likert scale of 1 to 7, where 1 represents “strongly disagree” and 7 represents “strongly agree” (Wagnild & Young, 1987). In previous research (Wick et al, 2020; Wick et al, 2019), the reliability analysis yielded a Cronbach’s α of .896; in the current study it was .910 indicating a good internal consistency. Scoloveno (2017) demonstrated good construct validity for this measure in an adult sample using factor analysis.

Modified Stressor Scale for College Students

This 41-item inventory was designed to measure psychosocial stressors in a college student’s life across six subscales (See Appendix H). Responses were recorded on a True/False scale, where 1 represented “true” and 2 represented “false” (Ota, Li, Msuda, Yabashi, Morita, Minagawa, & Yatsuya, 2016). In previous research (Wick et al, 2020;

Wick et al, 2019), the reliability analysis yielded a Cronbach's α of .776; in the current study it was .783 indicating good internal consistency. Acharya and colleagues (2016) demonstrated good construct validity for this measure in a college sample using factor analysis. The measure includes the following subscales:

1. **Family-Related Stressors.** Stress subscale consisting of 10 items, designed to measure stress related to family members or family life. Internal validity analysis resulted in a Cronbach's α of .914.
2. **Friend-Related Stressors.** Stress subscale consisting of 11 items, designed to measure stress related to friends or peers. Internal validity analysis resulted in a Cronbach's α of .900.
3. **Study-Related Stressors.** Stress subscale consisting of 6 items, designed to measure stress associated with academia or studies. Internal validity analysis resulted in a Cronbach's α of .723.
4. **Fulfillment-Related Stressors.** Stress subscale consisting of 8 items, designed to measure how one is perceiving their overall fulfillment in life. Internal validity analysis resulted in a Cronbach's α of .800.
5. **Part-Time Job-Related Stressors.** Stress subscale consisting of 3 items, designed to measure stress associated with working while also attending classes. Internal validity analysis resulted in a Cronbach's α of .667.
6. **Stressors Related to Extracurricular Activities.** Stress subscale consisting of 3 items, designed to measure stress associated with activities outside of the academic classroom. Internal validity analysis resulted in a Cronbach's α of .806.

Statistical Methods

The analyses in the current study were conducted using the Statistical Package for the Social Sciences (SPSS), Version 26 software, and in Analysis of Moment Structures (AMOS), Version 25 software (IBM Corporation, 2019). First, descriptive statistics were evaluated by computing overall means and standard deviations of the variables Subjective Happiness, Self-Efficacy, Resilience, Stress, and the Belonging subscales Peer Support and Faculty Support. Data were also examined for normality, outliers, and fit assumptions using scatterplots and skewness and kurtosis measures. Where there was evidence of skew, both transformed variables and untransformed variables were used to check for the robustness of the findings. Bivariate correlations among the variables were run, and all significant relationships were reported. Internal consistency was examined by conducting reliability analysis on each of the variables, and assessment of the structural evidence of the scales were examined through exploratory principle component analysis. A series of simple linear regressions were performed to determine which variables predicted the dependent variable, wellbeing. Finally, a hierarchical multiple regression was conducted to predict Subjective Happiness using Faculty Support, Peer Support, Resilience, Self-Efficacy, and Stress. There was evidence to suggest that mediation was present, therefore a model was hypothesized based on a review of the literature, and it was tested using structural equation modeling.

Power Analysis

Data were collected from 156 participants. This sample size was determined a priori using G-Power in an effort to power the study to investigate psychosocial wellbeing in university students. Therefore, assuming an alpha of .05 and a desired power of 90%, a sample size of 134

is required to detect an effect size of $r = .3$ (moderate). This study's sample size of 153 exceeds the number of subjects required to have sufficiently acceptable statistical power (See Figure 2).

CHAPTER IV

Results

Sample Characteristics

Table 1 shows the means and standard deviations for the various scales used in the study, including the subjective happiness, resilience, self-efficacy, grit, stress, and the belongingness subscales, faculty support and peer support. Tests of normality indicated that all variables fell within the acceptable range for both skewness and kurtosis, and additional analysis using the Kolmogorov-Smirnov test indicated non-significant *p*-values for all variables, further suggesting that the variables were normally distributed (See Table 1).

Data Reduction

Table 2 shows the Pearson's correlations between students' subjective happiness, resilience, self-efficacy, stress, faculty support, and peer support. Results of Pearson Product Moment correlations indicated that there were robust, significant positive associations between subjective happiness and resilience, grit, self-efficacy, faculty support, and peer support. Additionally, there were significant positive associations between resilience and grit, self-efficacy, faculty support, and peer support. Grit was found to have significant positive associations with self-efficacy and faculty support. The relationship between grit and peer support was not found to be significant. Self-Efficacy was found to have significant positive associations with faculty support and peer support. Faculty support and peer support also had a significant positive association. Finally, stress had significant negative associations with subjective happiness, resilience, grit, self-efficacy, faculty support, and peer support, indicating that as any of the variables increased, stress decreased (See Table 2).

There were high correlations among many of the primary outcome measures, including subjective happiness, resilience, and grit. Given that each of these measures were conceptualized as forming part of students' general wellbeing and in the interests of parsimony, we examined whether these measures could feasibly be combined into one or more overall constructs. Exploratory principle components analysis was conducted with the four items from the subjective happiness scale, the 25 items from the resilience scale, and the 12 items from the grit scale. Principal component analysis with varimax rotation was utilized for factor analysis. Eigenvalues dropped dramatically after the first factor, suggesting that the majority of the items from the three scales were measuring a similar, underlying construct (See Figure 3). Any items with factor loadings below .300 were removed from the analysis and the analysis was repeated. A single factor emerged, which was labeled 'wellbeing' (See Table 3). The items from this factor were standardized and aggregated to form a single 'wellbeing' variable, which constituted the primary dependent variable in subsequent analyses.

Research Question 1: *Does faculty support correlate with student wellbeing and self-efficacy, independent of peer support and stress?*

A series of standard linear regressions were conducted to determine if the direct paths of the proposed model (shown in Figure 4) were significant. Results, shown in Table 4, suggested that faculty support was a significant predictor of student wellbeing in the direct path, $F(1, 151) = 32.042, p < .001, \beta = .418$, indicating that as faculty support increased, so did the wellbeing of university undergraduates. The adjusted R^2 was .170, indicating that the faculty support accounted for 17.0% of the variance of the wellbeing factor score.

This model was then extended by constructing a series of hierarchical multiple regression models to investigate whether increased faculty support is associated with an increase in

university students' psychosocial wellbeing, controlling for the effects of peer support and stress.

In Model 2 of the hierarchical multiple regression, faculty support was entered as a predictor of wellbeing in step one, and peer support was entered in step two. This model was statistically significant, $F(2, 147) = 21.079, p < .001, \beta_{\text{faculty support}} = 9.600, \beta_{\text{peer support}} = 4.722$, adjusted $R^2 = .212$, explaining 21.2% of the variance of wellbeing, an increase of 3.8% from Model 1.

Importantly, faculty support remained a significant predictor of wellbeing, independent of peer support. Finally, in Model 3, faculty support was entered as a predictor of wellbeing in step one, peer support was entered in step two, and level of stress was entered in step three. This model was also statistically significant, $F(3, 146) = 19.839, p < .001, \beta_{\text{faculty support}} = 8.392, \beta_{\text{peer support}} = 3.238, \beta_{\text{stress}} = -36.780$, adjusted $R^2 = .275$, explaining 27.5% of the variance in wellbeing, and increase of 6.3% from Model 2. These results indicate that faculty support, peer support, and stress, are associated with and make individual, unique contributions to wellbeing. Further, this also suggests that faculty support still has a unique contribution to student psychosocial wellbeing, even when controlling for both peer support and stress, as seen in Model 3.

Research Question 2: *Does self-efficacy mediate the relation of faculty support to student wellbeing?*

In a second set of regressions, the indirect relation of faculty support to student wellbeing via self-efficacy were tested. First, these models showed that faculty support was a significant predictor of self-efficacy, $F(1, 153) = 26.827, p < .001, \beta = .386$, adjusted $R^2 = .144$.

Additionally, linear regression supported the direct relation of self-efficacy to student wellbeing, $F(1, 151) = 350.851, p < .001, \beta = .836$. The adjusted R^2 was .697, indicating that self-efficacy accounted for 69.7% of the variance in wellbeing.

A second hierarchical multiple regression was performed to determine whether self-efficacy acted as a mediator in the relationship between faculty support and wellbeing. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity were present, and they were not. In Model 2 of this hierarchical multiple regression, faculty support was entered as a predictor of wellbeing in step one, and self-efficacy was entered in step two. This model was statistically significant, $F(2, 150) = 179.967, p < .001$, $\beta_{\text{faculty support}} = .090$, $\beta_{\text{self-efficacy}} = 7.99$, adjusted $R^2 = .706$, explaining 70.6% of the variance of wellbeing, an increase of 53.2% from Model 1. While the model itself was significant, once self-efficacy was entered, the direct path from faculty support to student wellbeing was no longer significant, providing evidence for full mediation. Figures 4 and 5 show the mediation models, as constructed via structure equation modeling in SPSS AMOS software.

Research Question 3: *Does faculty support buffer the relation of stress to student wellbeing?*

Figure 6 shows the association between faculty support and wellbeing for students with low, medium, and high levels of stress. In order to determine whether faculty support acted as a buffer in the relation of stress to student wellbeing, a third hierarchical multiple regression was conducted. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. Faculty support was entered as a predictor of wellbeing in step one, and stress was entered in step two. This model was statistically significant, $F(2, 147) = 27.220, p < .001$, $\beta_{\text{faculty support}} = .347$, $\beta_{\text{stress}} = -.311$, adjusted $R^2 = .260$, explaining 26.0% of the variance of wellbeing, an increase of 8.6% from Model 1. In Model 3 of this hierarchical regression, the interaction between faculty support and stress was added in step three. This model was also statistically significant, $F(3, 146) = 19.085, p < .001$, $\beta_{\text{faculty support}} = -.843$, $\beta_{\text{stress}} = -.943$. However, there was no interaction between faculty support and stress. Thus,

while initial visual analysis of Figure 6 suggested that the buffering effect of faculty support on stress may be presented, model results indicate that there is no evidence to suggest that a buffering effect is taking place (See Table 6).

Model Fit

Model fit was measured by evaluation of the chi-square value, normed fit index, comparative fit index, incremental fit index, and the root mean square error of approximation. While the results of the model fit indices indicate that the chi-square is statistically significant, $\chi^2 = 18.692$, $df = 2$, $p = < .001$, and the root mean square error of approximation is above the .08 threshold (RMSEA = .223), there is evidence in the literature to suggest that these two measures are highly influenced by both sample size and degrees of freedom, which makes them susceptible to Type II error (Byrne, 1994).

The normed fit index (NFI = .920) of this model exceeds the threshold of .90, the comparative fit index (CFI = .924) exceeds the threshold of .92, and incremental fit index (IFI = .928) exceeds the threshold of .90. Due to the lower degrees of freedom ($df = 2$) and smaller sample size ($N = 158$), the significant chi-square and the above-threshold RMSEA are deemed acceptable, especially in light of other fit indices indicating good model fit.

CHAPTER V

Discussion

The transition to university potentially poses a time of great uncertainty and upheaval for undergraduate students, while representing the developmental milestone of shifting into emerging adulthood. The aim of this study was to examine the role that faculty support has on the transition into university, especially in looking at the psychosocial wellbeing of college students. This study showed that, beyond the role of peer support, faculty support correlated with students' sense of psychosocial wellbeing, and that this was the case regardless of the level of stress that students were under.

Psychosocial Wellbeing as a Construct

The first major goal of this study was to conceptualize psychosocial wellbeing in a way that captured the complexity of the construct. Because of the innumerable ways in which wellbeing is characterized throughout the literature, identifying a clear definition was challenging. Through factor analysis of individual items from several scales, it was found that components of resilience, grit, and subjective happiness did comprise a single construct. While this was a novel way in which to assess wellbeing, there is support from the literature for such a multi-dimensional approach. Many studies have conceptualized wellbeing in a more physical capacity while underrepresenting the role of psychosocial and emotional factors (Binfet, 2017; Maccanan et al., 2018; Renshaw & Bolognina, 2016), and it was exciting to see a pattern emerge from these data that suggested that happiness, resilience, and grit were linked. This new definition of wellbeing relies on participants' perceptions of their general sense of subjective happiness, as well as their happiness as compared to others. This, coupled with participants'

assessment of their own abilities to overcome adversity in both an acute sense and in the longer term, allowed for the working definition of wellbeing used in this study.

The Relation of Faculty Support to Wellbeing

The first objective of this study was to determine the role of faculty support as a uniquely contributing factor to university students' psychosocial wellbeing, beyond what is offered by their peer support network. While prior research has focused on the positive role that social support can have on students, the vast majority of the literature primarily explores what peers, friends, and family members contribute (Bono, 2011; Coffman & Gilligan, 2002). Three studies have previously focused on the interaction between faculty and student wellbeing. One study by Shelton (2003) found that increased faculty support was positively correlated with the retention of nursing students, another by Williamson and colleagues (2014) showed a correlation between undergraduate student wellbeing and faculty advising, and the third by Posselt (2017) made the connection between the importance of faculty support for doctoral students in their wellbeing and persistence through their programs. The current study in a Midwestern United States sample also replicated the correlation between faculty support and student wellbeing previously found in a previous research completed with a Western United States sample (Wick et al., 2020; Wick et al., 2019), where faculty support was highly correlated with both self-efficacy and student subjective happiness. The current study suggests a that support garnered from faculty was unique, even when accounting for peer support.

This thread of research falls in line with the conceptual understanding that others have inherent influence over individuals, as proposed by Bronfenbrenner's Ecological Systems Theory (1974), as described earlier in this thesis. This theory emphasizes the role that the various systems in which individuals are embedded have the ability to influence how individuals think,

behave, and perceive their world. Environment is a critical component to human development, and the findings of the current study are in line with this theory in that the microsystems, such as the institutions where students study and interactions with faculty and peers, may play an important role in shaping wellbeing.

Results from this research suggest that faculty members may foster a mutually beneficial relationship on those students they mentor and guide, though this relationship will need additional analysis in future studies. The most important finding was that while social support was initially tested, further analysis was conducted in order to disentangle whether different components of a students' social circle contributed uniquely to their overall feelings of wellbeing in their university experience. Findings suggest that faculty do contribute something distinct to their students, above what peers may provide. Students may feel a sense of comradery and friendship with their peers, but there is something extraordinary by which faculty are able to promote persistence and happiness within their students independent of what peers offer.

The Mediating Role of Self-Efficacy

The second major finding of this study was that increased faculty support is an important factor in student wellbeing. This supports previous research which has found faculty support correlates with students' positive wellbeing (Posselt, 2017; Shelton, 2003). It can be suggested that the role that faculty play in their students' lives impacts students' self-efficacy, or raising a students' belief in their own academic abilities, which in turn, supports their positive wellbeing (Baker & Griffin, 2010; Komarraju et al., 2010; Umbach & Wawrzynski, 2005). Findings from this study supported this hypothesis. Specifically, the results showed a link between higher levels of faculty support and higher student self-efficacy, which in turn correlated with higher levels of student wellbeing. Results also provided support that this was a mediated pathway because the

link between faculty support and wellbeing was attenuated after including self-efficacy as a mediator.

Although this correlational study cannot establish causal pathways, the model seems plausible when considering the role that faculty may play in boosting student self-efficacy. It is conceivable, for instance, that faculty influence students' persistence by acting as role models. In previous studies, the link has been made that self-efficacy and wellbeing are correlated (Chemers et al., 2001; Coffman & Gilligan, 2002; Gore, 2006; Sim & Moon, 2015), but there appears to be less research regarding faculty member's influence on their students' self-efficacy as a mechanism for positive correlation with wellbeing. This study shows evidence for this novel link from faculty support to student wellbeing via self-efficacy.

The Impact of Stress on Student Wellbeing

Finally, the third major finding from this study was that while faculty support was not shown to be a significant buffer for stress as hypothesized, increased faculty support did correlate with positive psychosocial wellbeing, regardless of the level of stress that students were experiencing. Although visual analysis of the data hinted that an interaction may be present, the statistical results with continuous variables failed to find any effect. In future studies, more precise measures of stress in university student populations may allow for better understanding of whether this effect exists. Students' psychosocial wellbeing consistently correlated with faculty support. Additionally, stress and student wellbeing were negatively correlated, indicating that stress does play a key role in student wellbeing, which is consistent with prior research (Friedlander et al., 2007; Robotham & Julian, 2006; Towbes & Cohen, 1996; Zajacova et al., 2005), though this role is unclear when faculty support is added to the model.

Limitations and Directions for Further Research

This study was not without its limitations. One of the major limitations for consideration is the cross-sectional nature of this project. While studying this sample at one specific point in time was necessary due to the correlational design, future research should examine these relations with longitudinal designs. Ideally, future research could be done by selecting a cohort of students from their transition into university and following them over the course of their undergraduate education. This would allow examination of multiple timepoints and at unique milestones throughout their university career. Additionally, the use of surveys for data collection allowed for anonymity of participants and allowed for the examination of student perceptions of their levels of support. However, much could be gained from personal face-to-face interviews, and the addition of qualitative data would offer significant depth and richness of data that cannot be gained by quantitative measures alone.

This study was also conducted at one university in the midwestern United States. While the intent of this project was to replicate and extend upon previous unpublished research conducted at a western United States university (Wick et al., 2020; Wick et al., 2019), there are limits to the use of a single geographical location for generalizability. While the relation between faculty support and components of self-efficacy and psychosocial wellbeing was found in both studies, further research and replication across other university campuses will need to be conducted to determine generalization of the current findings.

Finally, an unforeseeable limitation occurred as a result of the global pandemic of COVID-19 in the spring and summer of 2020. While the power analysis indicated that sufficient power existed given the number of participants in this study, the original intent was to match the number of participants from my previous research, and fell short by approximately 100

participants. Due to the nature of the questions being asked in the surveys related to perceived happiness, social support, and psychosocial wellbeing, the decision was made to cease data collection, as many of the factors being tested could potentially be significantly influenced by the pandemic crisis unfolding in 2020.

Potential future research endeavors related to faculty support and psychosocial wellbeing are numerous, as there are still many outstanding questions to answer. While increased faculty support was found to positively correlated with student wellbeing, research should continue to parse out the nuanced experiences behind this more general finding. For instance, it would be interesting to explore whether the relationship between increased faculty support and positive student wellbeing is more salient for transfer students compared to students who came into their universities as first-year students. It would also be interesting to compare first-generation college students with their peers who have a legacy of college attendance in their families, as first-generation status may significantly impact a students' self-efficacy (Inkelas et al., 2007). More importantly, does this relationship matter more for vulnerable populations such as people of color or members of the LGBTQIA+ community (Hausmann et al., 2007; Hurtado & Carter, 1997; Johnson et al., 2007)? Is the impact of increased faculty support even stronger when those faculty members look more like the individuals they are serving within these communities? There are many unanswered questions yet to be explored, which opens a robust path for future research.

Conclusion

This study, consistent with previous research findings (Maccagnan, 2018; Renshaw & Bolognino, 2016), supports the evidence that the psychosocial health and wellbeing of students is paramount to their success. Utilizing a holistic approach to explore the college experience allows

for deeper understanding of what university students are experiencing in their academic lives. While it is arguably a simpler task to explore quantitative metrics such as GPA and graduation as the primary outcome for determining whether students are ‘succeeding’ in college, these metrics fail to capture the very human aspect of internal psychological experiences. While physical health is important, it is equally if not more important to foster mental toughness, resolve, resilience, subjective happiness, and psychosocial wellbeing among college students. The university experience cannot be collapsed into numbers and metrics, but must be explored through a multi-faceted methodology that lends itself to understanding the complicated nature of what it means to be a healthy college student.

Researching university students from a more holistic approach includes investigating the different components or mechanisms that may influence the path towards success, such as the social support networks within which students are embedded. What is added to the literature through this study is determining that the correlation between faculty support and student wellbeing exists, and that increasing self-efficacy is one of the mechanisms by which faculty may support their students.

The implications of this study are potentially far-reaching. They provide initial, correlational support for the idea that faculty matter to students and providing this support can aid students in their overall feelings of wellness, both psychosocially and physiologically. With greater understanding of student wellbeing and its link to retention, there is the possibility to learn factors that influence students to make the decision to leave college. If their reasoning could be better understood, it could influence programming and intervention work that could lay a foundation to enable students to remain in their university programs. What may be derived from this study is that perhaps there are ways in which to support students through greater

faculty involvement. This also suggests that interventions with faculty members to offer more training towards practices that foster higher levels of support for their students could be key to higher retention and graduation rates. Finally, while it is critical for universities to understand the role that faculty play in their students' psychosocial wellbeing; in order to realize the potential of university faculty, we must find ways in which to support their own wellbeing and development, so that they, in turn, can better support their students' growth.

References

- Abuhassan, A., & Bates, T. C. (2015). Grit: Distinguishing effortful persistence from conscientiousness. *Journal of Individual Differences*, 36(4), 205-214,
- Acharya, L., Jin, L., & Collins, W. (2016). College life is stressful today: Emerging stressors and depressive symptoms in college students. *Journal of American College Health*, 66(7), <https://doi.org/10.1080/07448481.2018.1451869>
- Albertyn, R. M. (2016). Bringing the community into Higher Education. In *Being Scholarly – Festschrift in honour of the work of Eli M Bitzer*. <https://doi.org/10.18820/9781928314219/04>
- Arnett Jensen, J., & Galambos, N. L. (2004). Culture and conceptions of adulthood. *New Directions for Child and Adolescent Development*, (100), 91–98. <https://doi.org/10.1002/cd.77>
- Atkinson, R. D., Mayo, M., Bonous-Hammarth, M., Bringle, R. G., Hatcher, J. a., Muthiah, R. N., Woodard, C. T. (2010). Increasing the Success of Minority Students in Science and Technology. *Economics of Education Review*. <https://doi.org/10.1002/ir>
- Baker, C. N. (2013). Social Support and Success in Higher Education: The Influence of On-Campus Support on African American and Latino College Students. *Urban Review*, 45(5), 632–650. <https://doi.org/10.1007/s11256-013-0234-9>
- Baker, V. L., & Griffin, K. A. (2010). Beyond mentoring and advising: Toward understanding the role of faculty “developers” in student success. *About Campus*. <https://doi.org/10.1002/abc.20002>
- Baker-Eveleth, L. J., Chung, Y., Eveleth, D., O’Neill, M. (2011). Developing a community of practice through learning climate, leader support, and leader interaction. *American Journal of Business Education*, 4 (2): 33-40
- Barker, S., & Mamiseishvili, K. (2014). Reconnecting: A Phenomenological study of transition within a shared model of academic advising. *Journal of Student Affairs Research and Practice*, 51(4), 433–445. <https://doi.org/10.1515/jsarp-2014-0043>
- Bawdon, J. (2019). Academic confidence: A qualitative study of living learning communities and self-efficacy. *Capstone Projects and Master’s Theses*, 646, https://digitalcommons.csumb.edu/caps_thes_all/646

- Baxter, R., Hastings, N., Law, A., & Glass, E. J. . (2008). Understanding Resilience and Happiness Among College Students. *Animal Genetics*, 39(5), 561–563.
- Benada, N., & Chowdhry, R. (2017). A Correlational Study of Happiness, Resilience and Mindfulness among Nursing Students. *Indian Journal of Positive Psychology*, 8(2), 105. <https://doi.org/10.15614/ijpp/2017/v8i2/157077>
- Bennett, O., & Gilbert, K. (2009). Extending liaison collaboration: Partnering with faculty in support of a student learning community. *Reference Services Review*, 37(2), 131–142. <https://doi.org/10.1108/00907320910957170>
- Binfet, J.T. (2017). The effects of group-administered canine therapy on university students' wellbeing: A randomized controlled sample. *Anthrozoos*, 30(3), <https://doi.org/10.1080/08927936.2017.1335097>
- Bono, T. J. (2011). What good is engagement? Predicting academic performance and college satisfaction from personality, social support, and student engagement. *Dissertation Presented to the Graduate School of Arts and Sciences of Washington University In*, (January). <https://doi.org/10.1179/174962606X136919>
- Bowman, N. A. (2010). The development of psychological well-being among first-year college students. *Journal of College Student Development*, 51(2). <https://doi.org/10.1353/csd.0.0118>
- Brinkhurst, M., Rose, P., Maurice, G., & Ackerman, J. D. (2011). Achieving campus sustainability: Top-down, bottom-up, or neither? *International Journal of Sustainability in Higher Education*. <https://doi.org/10.1108/14676371111168269>
- Bronfenbrenner, U. (1992). Ecological systems theory. *Making human beings human: Bioecological perspectives on human development*, 106–173. Sage Publications Ltd.
- Bruning, R. H., Schraw, G. J., & Norby, M. M. (2011). Beliefs about self. *Cognitive Psychology and Instruction*, 107-133. Pearson Education.
- Byrne, B. M. (1994). *Structural equation modeling with EQS and EQS/Windows*. Thousand Oaks, CA: Sage Publications.
- Chemers, M. M., Hu, L. T., & Garcia, B. F. (2001). Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology*, 93(1), 55–64. <https://doi.org/10.1037/0022-0663.93.1.55>

- Choi, N. (2005). Self-efficacy and self-concept as predictors of college students' academic performance. *Psychology in the Schools*, 42(2), 197–205.
<https://doi.org/10.1002/pits.20048>
- Coffman, D. L., & Gilligan, T. D. (2002). Social Support, Stress, and Self-Efficacy: Effects on Students' Satisfaction. *Journal of College Student Retention: Research, Theory & Practice*, 4(1), 53–66. <https://doi.org/10.2190/bv7x-f87x-2mxl-2b3l>
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new Resilience scale: The Connor-Davidson Resilience scale (CD-RISC). *Depression and Anxiety*, 18(2), 76–82.
<https://doi.org/10.1002/da.10113>
- Datu, J. A. D., Valdez, J. P. M., & King, R. B. (2015). Perseverance counts but consistency does not: Validating the Grit Scale in a collectivist setting. *Curr Psychol*, 35, 121-130,
<https://doi.org/10.1007/s12144-015-9374-2>
- Deil-Amen, R., & Turley, R. L. (2007). A review of the transition to college literature in sociology. *Teachers College Record*.
- Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development*, 46 (3): 223-236,
<https://doi.org/10.1353/csd.2005.0023>
- Denovan, A., & Macaskill, A. (2017). Stress and Subjective Well-Being Among First Year UK Undergraduate Students. *Journal of Happiness Studies*, 18(2), 505–525.
<https://doi.org/10.1007/s10902-016-9736-y>
- Diener, E., & Lucas, R. (2009). Assessing well-being. *The Collected Works of Ed Diener, Social Indicators Research Series* (39), <https://doi.org/10.1007/978-90-481-2354-4>
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 9, 1087-1101.
- Duckworth, A. L., & Quinn, P. D. (2007). Development and Validation of the Grit Scale. *Journal of Personality Assessment*, 91(2), <https://doi.org/10.1080/00223890802634290>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160.

- Freeman, T. M., Anderman, L. H., & Jensen, J. M. (2007). Sense of belonging in college freshmen at the classroom and campus levels. *Journal of Experimental Education*, 75(3), 203–220. <https://doi.org/10.3200/JEXE.75.3.203-220>
- Friedlander, L. J., Reid, G. J., Shupak, N., & Cribbie, R. (2007). Social support, self-esteem, and stress as predictors of adjustment to university among first-year undergraduates. *Journal of College Student Development*, 48(3), 259–274. <https://doi.org/10.1353/csd.2007.0024>
- Gaumer Erikson, A. S., Soukup, J. H., Noonam, P. M., & McGurn, L. (2016). Self-efficacy questionnaire. Lawrence, KS: University of Kansas, Center for Research on Learning.
- Getzel, E. E. (2008). Addressing the Persistence and Retention of Students with Disabilities in Higher Education: Incorporating Key Strategies and Supports on Campus. *Exceptionality*, 16(4), 207–219. <https://doi.org/10.1080/09362830802412216>
- Gore, P. A. (2006). Academic self-efficacy as a predictor of college outcomes: Two incremental validity studies. *Journal of Career Assessment*, 14(1), 92–115. <https://doi.org/10.1177/1069072705281367>
- Hagerty, B. M. K., & Patusky, K. (1995). Developing a measure of sense of belonging. *Nursing Research*, 44(1), 9–13. <https://doi.org/10.1097/00006199-199501000-00003>
- Hale, C. J., Hannum, J. W., & Espelage, D. L. (2005). Social support and physical health: The importance of belonging. *Journal of American College Health*, 53(6), 276–284. <https://doi.org/10.3200/JACH.53.6.276-284>
- Hartley, M. T. (2011). Examining the relationships between resilience, mental health, and academic persistence in undergraduate college students. *Journal of American College Health*, 59(7), 596–604. <https://doi.org/10.1080/07448481.2010.515632>
- Haskett, M. E., Majumder, S., Kotter-Grühn, D., & Gutierrez, I. (2020). The role of university students' wellness in links between homelessness, food insecurity, and academic success. *Journal of Social Distress and Homelessness*, <https://doi.org/10.1080/10530789.2020.1733815>
- Hausmann, L. R. M., Schofield, J. W., & Woods, R. L. (2007). Sense of belonging as a predictor of intentions to persist among African American and white first-year college students. *Research in Higher Education*, 48(7), 803–839. <https://doi.org/10.1007/s11162-007-9052-9>

- Haycock, L. A., McCarthy, P., & Skay, C. L. (1998). Procrastination in college students: The role of self-efficacy and anxiety. *Journal of Counseling and Development*, 76(3), 317–324. <https://doi.org/10.1002/j.1556-6676.1998.tb02548.x>
- Hoffman, M., Richmond, J., Morrow, J., & Salomone, K. (2002). Investigating “Sense of Belonging” in First-Year College Students. *Journal of College Student Retention: Research, Theory & Practice*, 4(3), 227–256. <https://doi.org/10.2190/dryc-cxq9-jq8v-ht4v>
- Holahan, C. J., Valentiner, D. P., & Moos, R. H. (1994). Parental support and psychological adjustment during the transition to young adulthood in a college sample. *Journal of Family Psychology*, 8(2), 215–223. <https://psycnet.apa.org/doi/10.1037/0893-3200.8.2.215>
- Hoffman, N., Vargas, J., & Santos, J. (2008). Blending high school and college: Rethinking the transition. *New Directions for Higher Education*, 2008(144), 15–25. <https://doi.org/10.1002/he.322>
- Hurtado, S., & Carter, D. F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students’ sense of belonging. *Sociology of Education*, 70(4), 324–345. <https://doi.org/10.2307/2673270>
- Inkelas, K. K., Daver, Z. E., Vogt, K. E., & Leonard, J. B. (2007). Living-learning programs and first-generation college students’ academic and social transition to college. *Research in Higher Education*, 48(4), 403–434. <https://doi.org/10.1007/s11162-006-9031-6>
- Jairam, D., & Kahl, D. H. (2012). Navigating the doctoral experience: The role of social support in successful degree completion. *International Journal of Doctoral Studies*, 7, 311–329. <https://doi.org/10.28945/1700>
- Johnson, D. R., Alvarez, P., Longerbeam, S., Soldner, M., Inkelas, K. K., Leonard, J. B., & Rowan-Kenyon, H. (2007). Examining sense of belonging among first-year undergraduates from different racial/ethnic groups. *Journal of College Student Development*, 48(5), 525–542. <https://doi.org/10.1353/csd.2007.0054>
- Jun, W. H., & Jo, M. J. (2016). Factor affecting happiness among nursing students in South Korea. *Journal of Psychiatric and Mental Health Nursing*, 23(6–7), 419–426. <https://doi.org/10.1111/jpm.12330>

- Juvonen, J., Espinoza, G., & Knifsend, C. (2012). The role of peer relationships in student academic and extracurricular engagement. *Handbook of Research on Student Engagement*, 387-401, http://www.doi.org/10.1007/978-1-4614-2018-7_18
- Kezar, A., & Kitchen, J. A. (2020, March 1). Supporting First-Generation, Low-Income, and Underrepresented Students' Transitions to College Through Comprehensive and Integrated Programs. *American Behavioral Scientist*. SAGE Publications Inc. <https://doi.org/10.1177/0002764219869397>
- Kilgo, C. A., Mollet, A. L., & Pascarella, E. T. (2016). The estimated effects of college student involvement on psychological well-being. *Journal of College Student Development*, 57 (8), 1043-1049, <https://www.doi.org/10.1353/csd.2016.0098>
- Kim, D. H., & Schneider, B. (2005). Social capital in action: Alignment of parental support in adolescents' transition to postsecondary education. *Social Forces*, 84(2), 1181-1206, <https://doi.org/10.1353/sof.2006.0012>
- Knifsend, C. A. (2018) Intensity of activity involvement and psychosocial well-being among students. *Active Learning in Higher Education*, https://www.doi.org/10.1007/978-1-4614-2018-7_18
- Komarraju, M., Musulkin, S., & Bhattacharya, G. (2010). Role of student-faculty interactions in developing college students' academic self-concept, motivation, and achievement. *Journal of College Student Development*, 51(3), 332–342. <https://doi.org/10.1353/csd.0.0137>
- Lamport, M. A. (1993). Student-faculty informal interaction and the effect on college student outcomes: a review of the literature. *Adolescence*.
- Linley, J. L., Nguyen, D., Brazelton, G. B., Becker, B., Renn, K., & Woodford, M. (2016). Faculty as Sources of Support for LGBTQ College Students. *College Teaching*, 64(2), 55–63. <https://doi.org/10.1080/87567555.2015.1078275>
- Longwell-Grice, R., & Longwell-Grice, H. (2007). Testing tinto: How do retention theories work for first-generation, working-class students? *Journal of College Student Retention: Research, Theory and Practice*, 9(4), 407–420. <https://doi.org/10.2190/CS.9.4.a>
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research*, 46(2), 137–155. <https://doi.org/10.1023/A:1006824100041>

- Maccagnan, A., Wren-Lewis, S., Brown, H., & Taylor, T. (2018). Wellbeing and society: Towards quantification of the co-benefits of wellbeing. *Soc Indic Res*, 141, 217-243, <https://doi.org/10.1007/s11205-017-1826-7>
- Mattei, D., & Schaefer, C.E. (2004). An investigation of validity of the Subjective Happiness Scale, *Psychological Reports*, 94(1), 288-290, <https://doi.org/10.2466%2Fpr0.94.1.288-290>
- Means, D. R., & Pyne, K. B. (2017). Finding my way: Perceptions of institutional support and belonging in low-income, first-generation, first-year college students. *Journal of College Student Development*, 58(6), 907–924. <https://doi.org/10.1353/csd.2017.0071>
- Meeuwisse, M., Severiens, S. E., & Born, M. P. (2010). Learning environment, interaction, sense of belonging and study success in ethnically diverse student groups. *Research in Higher Education*, 51(6), 528–545. <https://doi.org/10.1007/s11162-010-9168-1>
- Micari, M., & Pazos, P. (2012). Connecting to the Professor: Impact of the Student–Faculty Relationship in a Highly Challenging Course. *College Teaching*, 60(2), 41–47. <https://doi.org/10.1080/87567555.2011.627576>
- Milo, R., & Schuldiner, M. (2009). Weizmann Young PI Forum: The Power of Peer Support. *Molecular Cell*. <https://doi.org/10.1016/j.molcel.2009.12.008>
- Moghie, L., & Kazarian, S.S. (2012). Subjective happiness of Lebanese college youth in Lebanon: Factorial structure and invariance of the Arabic Subjective Happiness Scale. *Soc Indic Res*, 109, 203-210, <https://doi.org/10.1007/s11205-011-9895-5>
- Moss-Racusin, C. A., Dovidio, J. F., Brescoll, V. L., Graham, M. J., & Handelsman, J. (2012). Science faculty’s subtle gender biases favor male students. *Proceedings of the National Academy of Sciences of the United States of America*, 109(41), 16474–16479. <https://doi.org/10.1073/pnas.1211286109>
- Morrow, J., & Ackermann, M. (2012). Intention to persist and retention of first-year students: The importance of motivation and sense of belonging. *College Student Journal*, 46(3), 483-491
- Mounts, N. S., Valentiner, D. P., Anderson, K. L., & Boswell, M. K. (2005). Shyness, sociability, and parental support for the college transition: Relation to adolescents’ adjustment. *Journal of Youth and Adolescence*, 35(1), 71-80, <https://doi.org/10.1007/s10964-005-9002-9>

- Nickerson, C., Diener, E., & Schwarz, N. (2011). Positive Affect and College Success. *Journal of Happiness Studies*, 12(4), 717–746. <https://doi.org/10.1007/s10902-010-9224-8>
- Nordstrom, A. H., Goguen, L. M. S., & Hiester, M. (2014). The effect of social anxiety and self-esteem on college adjustment, academics, and retention. *Journal of College Counseling*, 17(1), 48–63. <https://doi.org/10.1002/j.2161-1882.2014.00047.x>
- Okun, M. A., Levy, R., Karoly, P., & Ruehlman, L. (2009). Dispositional happiness and college student GPA: Unpacking a null relation. *Journal of Research in Personality*, 43(4), 711–715. <https://doi.org/10.1016/j.jrp.2009.03.010>
- O'Meara, K. A., Knudsen, K., & Jones, J. (2013). The role of emotional competencies in faculty-doctoral student relationships. *Review of Higher Education*, 36(3), 315–347. <https://doi.org/10.1353/rhe.2013.0021>
- Ota, A., Li, Y., Masuda, A., Yabashi, A., Morita, M., Minagawa, A., & Yatsuya, H. (2016). Validity and reliability of the Modified Stressor Scale for College Student among medical and medical science students in a private university in Japan. *Fujita Medical Journal*, 2(2), 25–30. https://doi.org/10.20407/fmj.2.2_25
- Pittman, L. D., & Richmond, A. (2008). University belonging, friendship quality, and psychological adjustment during the transition to college. *Journal of Experimental Education*, 76(4), 343–362. <https://doi.org/10.3200/JEXE.76.4.343-362>
- Posselt, J. R., & Grodsky, E. (2017). Graduate education and social stratification. *Annual Review of Sociology*, 43 (July 2017), 353-378. <https://doi.org/10.1146/annurev-soc-081715-074324>
- Reeve, K. L., Shumaker, C. J., Yearwood, E. L., Crowell, N. A., & Riley, J. B. (2013). Perceived stress and social support in undergraduate nursing students' educational experiences. *Nurse Education Today*, 33(4), 419–424. <https://doi.org/10.1016/j.nedt.2012.11.009>
- Renshaw, T. L., & Bolognino, S. J. (2016). The College Student Subjective Wellbeing Questionnaire: A Brief, Multidimensional Measure of Undergraduate's Covitality. *Journal of Happiness Studies*, 17(2), 463–484. <https://doi.org/10.1007/s10902-014-9606-4>
- Ridner, S. L., Newton, K. S., Staten, R., Crawford, T. N., Hall L. A. (2016). Predictors of well-being among college students. *Journal of American College Health*, 64(2). <https://doi.org/10.1080/07448481.2015.1085057>

- Robotham, D., & Julian, C. (2006). Stress and the higher education student: A critical review of the literature. *Journal of Further and Higher Education*, 30(2), 107–117.
<https://doi.org/10.1080/03098770600617513>
- Ross, S., Niebling, B., & Heckert, T. (1999). Sources of Stress among College Students. *College Student Journal*, 33(2), 312.
- Ryzin, M., Gravely, A., Roseth, C. (2009). Autonomy, belongingness, and engagement in school as contributors to adolescent psychological well-being. *J Youth Adolescence*, 38, 1-12,
<https://www.doi.org/10.1007/s10964-007-9257-4>
- Safaria, T. (2014). Forgiveness, Gratitude, and Happiness among College Students. *International Journal of Public Health Science (IJPHS)*, 3(4), 241.
<https://doi.org/10.11591/ijphs.v3i4.4698>
- Sawatzky, R. G., Ratner, P. A., Richardson, C. G., Washburn, C., Sudmant, W., & Mirwaldt, P. (2012). Stress and depression in students: The mediating role of stress management self-efficacy. *Nursing Research*, 61(1), 13–21.
<https://doi.org/10.1097/NNR.0b013e31823b1440>
- Schwartz, S., & Tinto, V. (1987). Leaving College: Rethinking the Causes and Cures of Student Attrition. *Academe*, 73(6), 46. <https://doi.org/10.2307/40250027>
- Scoloveno, R. (2017). Measures of resilience and an evaluation of the resilience scale. *International Journal of Emergency Mental Health and Human Resilience*, 19 (4), 1-7.
- Shakir, H. J., Cappuzzo, J. M., Shallwani, H., Kwasnicki, A., Bullis, C., Wang, K., Hess, R. M., & Levy, E. I. (2020). Relationship of grit and resilience to burnout among U.S. neurosurgery residents. *World Neurosurgery*, 134, 224-236.
<https://doi.org/10.1016/j.wneu.2019.10.043>
- Shelton, E. N. (2003). Faculty support and student retention. *Journal of Nursing Education*, 42(2), 68–76. <https://doi.org/10.3928/0148-4834-20030201-07>
- Short, C. A., Barnes, S., Carson, J. F., & Platt, I. (2020). Happiness as a predictor of resilience in students at a further education college. *Journal of Further and Higher Education*, 44(2), 170–184. <https://doi.org/10.1080/0309877X.2018.1527021>
- Sim, H. S., & Moon, W. H. (2015). Relationships between self-efficacy, stress, depression and adjustment of college students. *Indian Journal of Science and Technology*, 8 (35),
<https://www.doi.org/10.17485/ijst/2015/v8i35/86802>

- Stebbleton, M. J., Soria, K. M., & Huesman, R. L. (2014). First-generation students' sense of belonging, mental health, and use of counseling services at public research universities. *Journal of College Counseling*, 17(1), 6–17.
<https://doi.org/10.1002/j.2161-1882.2014.00044.x>
- Stein, F., & Rankin, L. (1998). Developing a Community of Practice. *Journal of Museum Education*, 23(2), 19–21. <https://doi.org/10.1080/10598650.1998.11510377>
- Steinhardt, M., & Dolbier, C. (2008). Evaluation of a resilience intervention to enhance coping strategies and protective factors and decrease symptomatology. *Journal of American College Health*, 56(4), 445–453. <https://doi.org/10.3200/JACH.56.44.445-454>
- Strayhorn, T. L. (2018). *College Students' Sense of Belonging*. *College Students' Sense of Belonging*. <https://doi.org/10.4324/9781315297293>
- Terenzini, P. T., Rendon, L. I., Lee Upcraft, M., Millar, S. B., Allison, K. W., Gregg, P. L., & Jalomo, R. (1994). The transition to college: Diverse students, diverse stories. *Research in Higher Education*, 35(1), 57–73. <https://doi.org/10.1007/BF02496662>
- Thomas, L. (2002). Student retention in higher education: The role of institutional habitus. *Journal of Education Policy*, 17(4), 423–442.
<https://doi.org/10.1080/02680930210140257>
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45, 89–125
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press
- Tovar, E., & Simon, M. A. (2010). Factorial structure and invariance analysis of the Sense of Belonging Scales. *Measurement and Evaluation in Counseling and Development*, 34(199), <https://doi.org/10.1177/0748175610384811>
- Towbes, L. C., & Cohen, L. H. (1996). Chronic stress in the lives of college students: Scale development and prospective prediction of distress. *Journal of Youth and Adolescence*, 25(2), 199–217. <https://doi.org/10.1007/BF01537344>
- Turner, M., Holdsworth, S., & Scott-Young, C. M. (2017). Resilience at University: the development and testing of a new measure. *Higher Education Research and Development*, 36(2), 386–400. <https://doi.org/10.1080/07294360.2016.1185398>

- Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education*, 46(2), 153–184.
<https://doi.org/10.1007/s11162-004-1598-1>
- Van Ryzin, M. J., Gravely, A. A., & Roseth, C. J. (2009). Autonomy, belongingness, and engagement in school as contributors to adolescent psychological well-being. *Journal of Youth and Adolescence*, 38(1), 1–12. <https://doi.org/10.1007/s10964-007-9257-4>
- Vuong, M., Brown-Welty, S., & Tracz, S. (2010). The effects of self-efficacy on academic success of first-generation college sophomore students. *Journal of College Student Development*, 51(1), 50–64. <https://doi.org/10.1353/csd.0.0109>
- Wagnild, G. M., & Young, H. M. (1993). Development and psychometric evaluation of the Resilience Scale. *Journal of Nursing Measurement*, 1(2), 165–178.
- Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science*, 331(6023), 1447–1451.
<https://doi.org/10.1126/science.1198364>
- Warnecke, A., Baum, C., Peer, J., & Goreczny, A. (2014). Intercorrelations between Individual Personality Factors and Anxiety. *College Student Journal*, 48(1), 23.
- Wick, K.M., Ramm, E., Stevenson, T., Kesselring, S., Swanson, L., Swearer, S., & Clark, C. (2020). Fostering connection: The importance of faculty involvement in student retention. *Poster presented at the Annual Meeting of the American Psychological Association, Washington, D.C.* *Conference cancelled due to COVID-19
- Wick, K. M., Stevenson, T.L., Ramm, E., & Meyers, L. S. (2019). Building connection: Predicting sense of belong from resilience with self-efficacy and subjective happiness as mediators. *Poster presented at the Annual Meeting of the Western Psychological Association, Pasadena, CA.*
- Williams G. M., Pendlebury, H., Thomas, K., & Andrew, P.S. (2017). The Student Wellbeing Process Questionnaire (Student WPQ), *Psychology*, 8(11), 1748-1761,
<https://doi.org/10.4236/psych.2017.811115>
- Windle, G., Bennett, K. M., & Noyes, J. (2011). A methodological review of resilience measurement scales. *Health and Quality of Life Outcomes*, 9.
<https://doi.org/10.1186/1477-7525-9-8>

- Wolff, S. (1995). The concept of resilience. *Australian and New Zealand Journal of Psychiatry*, 29(4), 565–574. <https://doi.org/10.3109/00048679509064968>
- Zajacova, A., Lynch, S. M., & Espenshade, T. J. (2005). Self-efficacy, stress, and academic success in college. *Research in Higher Education*.
<https://doi.org/10.1007/s11162-004-4139-z>
- Zumbrunn, S., McKim, C., Buhs, E., & Hawley, L. R. (2014). Support, belonging, motivation, and engagement in the college classroom: A mixed method study. *Instructional Science*, 42(5), 661–684. <https://doi.org/10.1007/s11251-014-9310-0>

Table 1

Descriptive Statistics and Tests of Normality for Variables Subjective Happiness, Resilience, Self-Efficacy, Stress, Faculty Support, & Peer Support

	<i>M</i>	<i>SD</i>	<i>SE</i>	<i>Skewness</i>	<i>Kurtosis</i>	<i>KS p</i>
Subjective Happiness	5.076	1.158	.093	-.521	-.102	.129
Resilience	5.565	.694	.056	-.543	.384	.073
Self-Efficacy	4.218	.536	.043	-.594	-.407	.102
Grit	3.107	.469	.038	.594	.694	.108
Stress	1.336	.133	.108	.396	-.100	.089
Faculty Support	3.591	.650	.052	-.025	-.074	.064
Peer Support	3.653	.856	.069	-.431	-.265	.070

Note: Based on a valid $N = 155$. M = mean; SD = standard deviation; SE = standard error

$KS p$ = Kolmogorov-Smirnov test of normality, non-significant p indicates variable normality.

Table 2

Correlation of Variables Subjective Happiness, Resilience, Self-Efficacy, Stress, Faculty Support, & Peer Support

	1	2	3	4	5	6	7
Happiness	-						
Resilience	.613**	-					
Grit	.268**	.333**	-				
Self-Efficacy	.581**	.785**	.426**	-			
Stress	-.471**	-.366**	-.314**	-.377**	-		
Faculty Support	.261**	.368**	.214**	.386**	-.232**	-	
Peer Support	.415**	.261**	.141	.302**	-.311**	.316**	-

Note: ** $p < .01$.

1 = Happiness; 2 = Resilience; 3 = Grit; 4 = Self-Efficacy, 5 = Stress, 6 = Faculty Support; 7 = Peer Support.

Table 3

Results From a Factor Analysis of the Subjective Happiness Scale, Resilience Scale, and Grit Scale

	Factor Loading		
	1	2	3
Factor 1: Wellbeing			
SH1. In general, I consider myself: (not a very happy person – a very happy person)	.695	-.430	-.217
SH2. Compared to most of my peers, I consider myself: (less happy – more happy)	.700	-.453	-.199
SH3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you? (not at all – a great deal)	.590	-.550	-.092
SH4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you? (not at all – a great deal)	.460	-.172	-.475
R1. When I make plans, I follow through with them	.559	.106	-.219
R2. I usually manage one way or another	.535	.356	.101
R3. I am able to depend on myself more than anyone else	.448	.322	.351
R4. Keeping interested in things is important to me	.523	-.091	.104
R6. I feel proud that I have accomplished things in life	.731	-.092	-.151
R7. I usually take things in stride	.657	-.119	.217
R8. I am friends with myself	.688	-.321	.234
R9. I feel that I can handle many things at a time	.715	.154	.109
R10. I am determined	.685	.238	-.125
R13. I can get through difficult times because I've experienced difficulty before	.583	.218	.212
R14. I have self-discipline	.694	.225	-.179
R15. I keep interested in things	.713	.058	.075
R16. I can usually find something to laugh about	.599	-.176	.052
R17. My belief in myself gets me through hard times	.687	-.181	.158
R18. In an emergency, I'm someone people can generally rely on	.598	.189	-.148
R19. I can usually look at a situation in a number of ways	.598	.047	.330

R20. Sometimes I make myself do things whether I want to or not	.421	.313	-.148
R21. My life has meaning	.732	-.287	-.129
R23. When I'm in a difficult situation, I can usually find my way out of it	.585	.322	.296
R24. I have enough energy to do what I have to do	.618	-.229	.168
R25. It's okay if there are people who don't like me	.447	-.076	.407
G4. Setbacks don't discourage me	.444	-.178	.273
G6. I am a very hard worker	.567	.463	-.240
G9. I finish whatever I begin	.482	.143	-.444
G10. I have achieved a goal that took years of work	.481	.254	-.139
G12. I am diligent	.571	.389	-.127

Note. $N = 155$. The extraction method was principal component analysis with varimax rotation. Factor loadings above .300 are in bold. SH = Subjective Happiness scale; R = Resilience scale; G = Grit scale.

Table 4

Hierarchical Linear Regression Predicting Wellbeing from Faculty Support, Peer Support, and Stress

		B	95% CI for B		SE-B	β	Adj R^2	ΔR^2
			LL	UL				
1	Constant	-42.311	-57.116	-27.506			.	
	Faculty Support	11.634	7.588	15.680	.423	.423***	.174	.174
2	Constant	-52.275	-68.267	-36.238				
	Faculty Support	9.600	5.410	13.790	.349	.349***		
	Peer Support	4.72	1.479	7.964	.222	.222**	.212	.038
3	Constant	6.680	-8.328	41..688				
	Faculty Support	8.392	4.321	12.463	.305	.305***		
	Peer Support	3.238	.028	6.448	.152	.152*		
	Stress	-36.780	-56.411	-17.149	-.275	-.275***	.275	.063

Note: B = unstandardized Beta; CI = confidence interval; *LL* = lower limit; *UL* = upper limit; SE-B = standard error; β = standardized Beta; Adj R^2 = adjusted R^2 ; ΔR^2 = change in R^2 .

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 5

Hierarchical Linear Regression Predicting Self-Efficacy from Faculty Support, Peer Support, and Stress

		B	95% CI for B		SE-B	β	Adj R^2	ΔR^2
			LL	UL				
1	Constant	3.049	2.603	3.495	.226			
	Faculty Support	.324	.202	.446	.062	.393***	.149	.149
2	Constant	2.747	2.258	3.236	.247			
	Faculty Support	.269	.144	.395	.064	.327***		
	Peer Support	.135	.037	.234	.050	.211**	.184	.035
3	Constant	4.473	3.398	5.547	.544			
	Faculty Support	.237	.114	.359	.062	.287***		
	Peer Support	.090	-.008	.188	.050	.140		
	Stress	-1.079	-1.683	-.478	.306	-.266**	.242	.058

Note: B = unstandardized Beta; CI = confidence interval; *LL* = lower limit; *UL* = upper limit; SE-B = standard error; β = standardized Beta; Adj R^2 = adjusted R^2 ; ΔR^2 = change in R^2 .

** $p < .01$; *** $p < .001$.

Table 6*Linear regression predicting Wellbeing from Centered Interaction of Faculty Support and Stress*

		B	95% CI for B		SE-B	β	Adj R^2	ΔR^2
			LL	UL				
1	Constant	.034	-2.522	2.590	1.293			
	C Faculty Support	9.559	5.629	13.489	1.989	.348**		
	C Stress	-38.168	-57.827	-18.510	9.947	-.285**		
	C Interaction	24.494	-7.250	56.239	16.062	.110	.282	.282
	Faculty Support X Stress							

Note: B = unstandardized Beta; CI = confidence interval; *LL* = lower limit; *UL* = upper limit; SE-B = standard error; β = standardized Beta; Adj R^2 = adjusted R^2 ; ΔR^2 = change in R^2 .

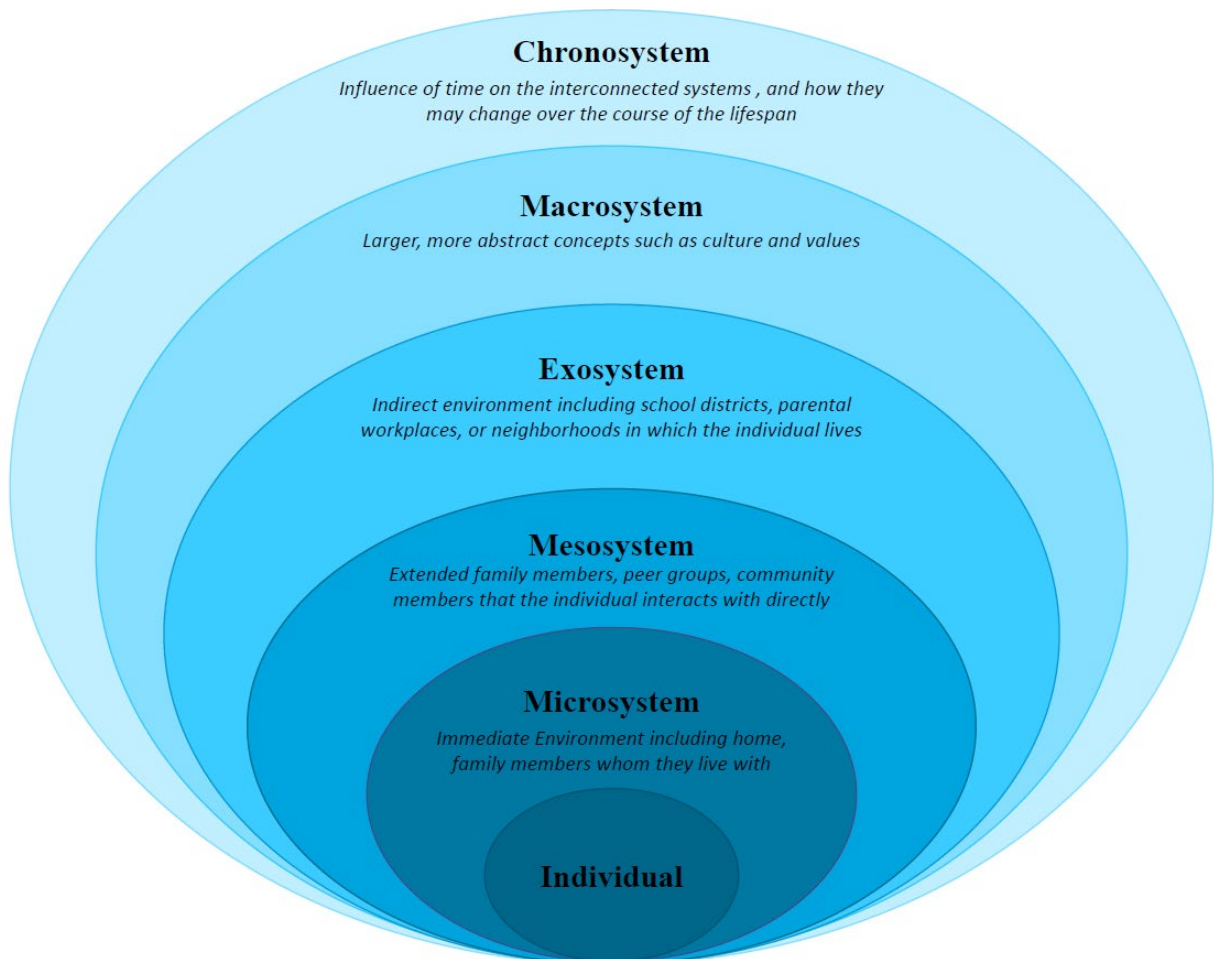
C Faculty Support = mean centered Faculty Support; C Stress = mean centered Stress; C

Interaction = mean centered interaction of Faculty Support by Stress.

** $p < .01$.

Figure 1

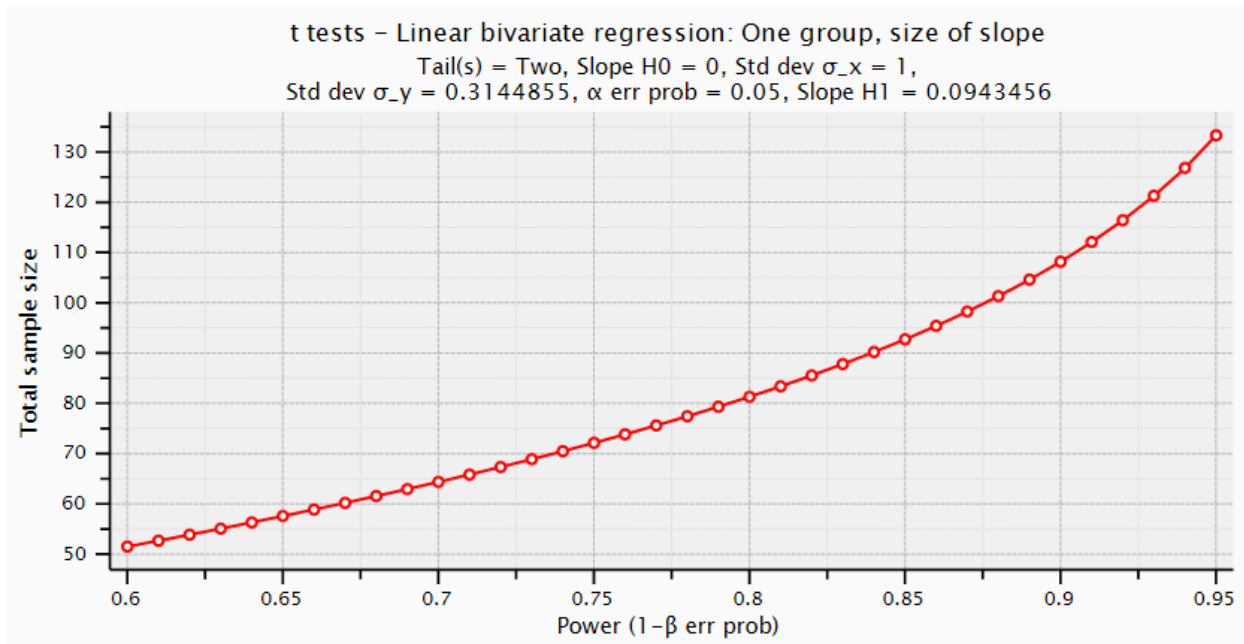
Illustration of Bronfenbrenner's Ecological Systems Theory



Note. Based on the model originally proposed by Urie Bronfenbrenner (1974).

Figure 2

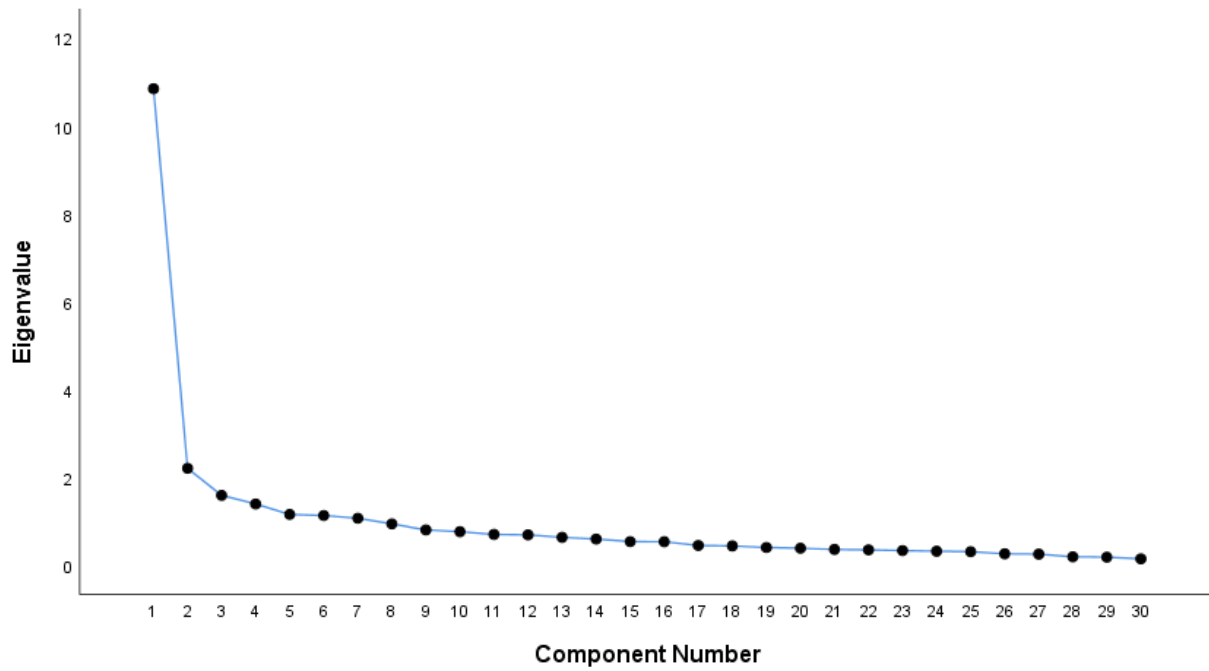
Power Analysis of Linear Bivariate Regression, Calculating Necessary Sample Size.



Note. $N = 155$; assuming an alpha of .05 and a desired power of 90%, a sample size of 134 is required to detect an effect size of $r = .3$ (moderate); this study's sample size of 153 exceeds the number of subjects required to have sufficiently acceptable statistical power.

Figure 3

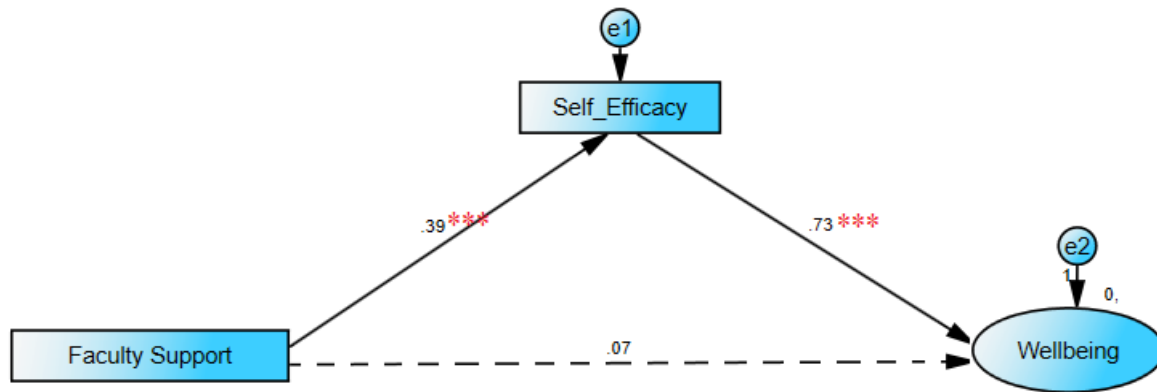
Exploratory factor analysis of items from Subjective Happiness, Resilience, and Grit scales



Note. $N = 155$. Principal components analysis utilizing varimax rotation for factor analysis indicated that 1 factor emerged.

Figure 4

Structural Equation Model Showing Faculty Support Predicting Wellbeing, Fully Mediated by Self-Efficacy

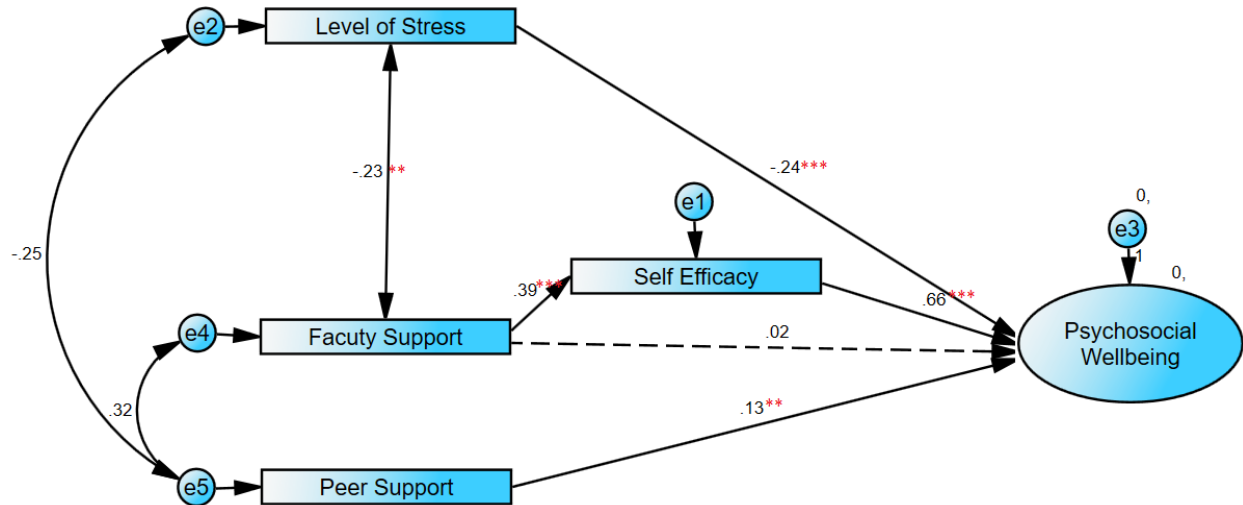


Note. $N = 155$. The relationship between faculty support and student wellbeing is fully mediated by self-efficacy; when self-efficacy is added, the direct path from faculty support to wellbeing is no longer significant ($p > .05$).

*** $p < .001$.

Figure 5

Structure Equation Model Showing Peer Support, Faculty Support (Fully Mediated by Self-Efficacy) and Stress Predicting Wellbeing



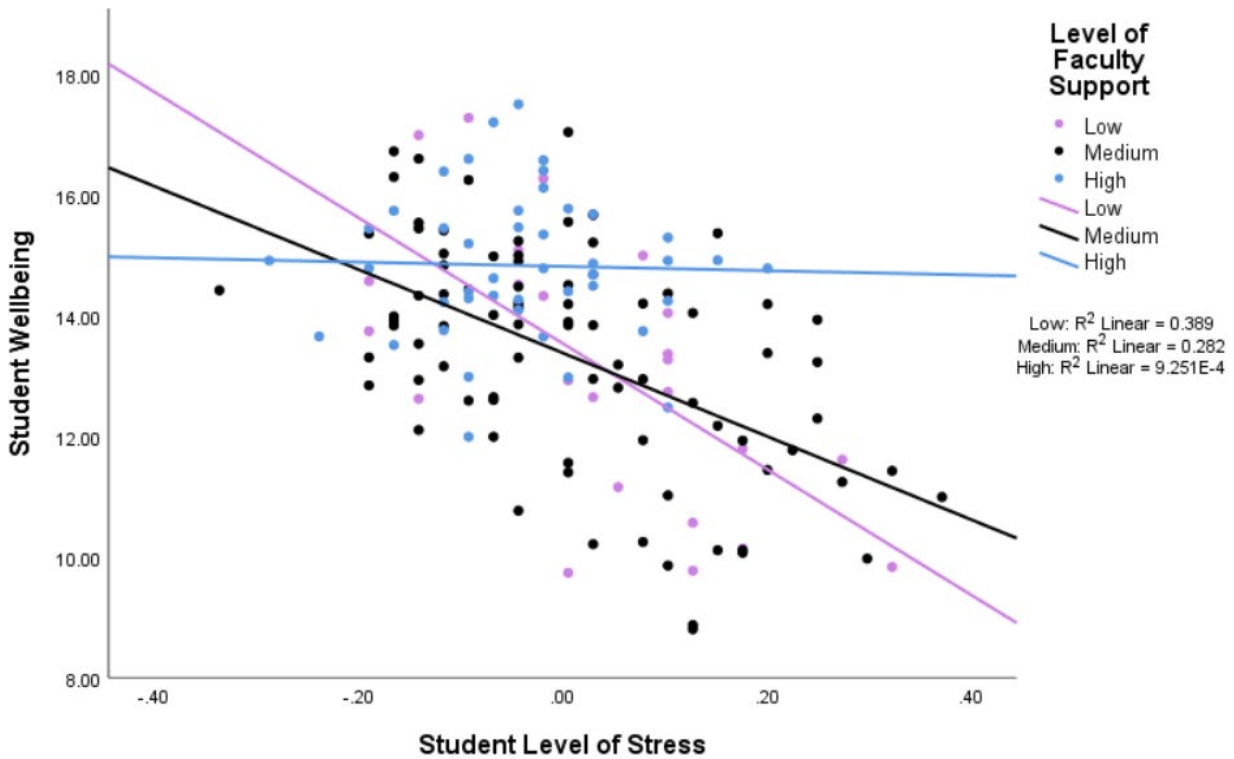
Note. $N = 155$.

This structural equation model predicts university students' psychosocial wellbeing from levels of stress, peer support, and faculty support with self-efficacy as a mediator. Dotted lines indicate nonsignificant paths while solid lines indicate significant paths. Statistics are standardized regression coefficients; e1 through e5 indicate standard error; double-arrowed lines indicate correlation of standard errors.

$** p < .01$. $*** p < .001$.

Figure 6

Analysis of the Potential Interaction of Level of Stress on Student Wellbeing, Filtered by Level of Faculty Support



Note. $N = 155$, interaction $p > .05$. The continuous variable faculty support was dummy-coded for illustrative purposes based on visual inspection of the distribution, where 0 = low levels of faculty support, 1 = moderate levels of faculty support, & 2 = high levels of faculty support. Faculty support, stress, and the interaction of faculty support and stress were mean centered.

APPENDIX A

Institutional Review Board Approval Letter



March 6, 2020

Kelley Wick
Department of Educational Psychology
TEAC 114 UNL NE 685880345

Carrie Clark
Department of Educational Psychology
TEAC 241 UNL NE 685880345

IRB Number: 20191019760EP
Project ID: 19760
Project Title: Fostering connection: Predicting sense of belonging on college campuses

Dear Kelley:

The Institutional Review Board for the Protection of Human Subjects has completed its review of the Request for Change in Protocol submitted to the IRB.

o Date of Expedited review and approval: 03/06/2020

The change request form has been approved to:

1. It has been approved to add two demographic questions to the survey.
2. Additional personnel have been added to the project. They are up-to-date on CITI & COI and are approved to work on the project.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

- * Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
- * Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
- * Any protocol violation or protocol deviation
- * An incarceration of a research participant in a protocol that was not approved to include prisoners
- * Any knowledge of adverse audits or enforcement actions required by Sponsors
- * Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- * Any breach in confidentiality or compromise in data privacy related to the subject or others; or
- * Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

This letter constitutes official notification of the approval of the protocol change. You are therefore authorized to implement this change accordingly.

If you have any questions, please contact the IRB office at 402-472-6965.

Sincerely,

Becky R. Freeman

Becky R. Freeman, CIP
for the IRB



APPENDIX B

Demographic Information

Please answer all questions to the best of your ability.

Age (in years):

GPA (please circle):	2.0 and under	2.01 to 2.50	2.51 to 3.00	3.01 to 3.50
	3.51 to 4.00	over 4.00		

Have you ever transferred from any other college?	Yes	No, I started at University of Nebraska-Lincoln as a first-year.
--	-----	--

Gender (please circle):	Male	Female	Transgender	Non-Binary
	GenderQueer	Agender	Gender: <input type="text"/>	

Race/Ethnicity (circle those with which you identify):	American Indian or Alaska Native	Asian	Black or African-American	Hispanic or Latinx
	Native Hawaiian or Other Pacific Islander	White	More than one race	Unknown

Do you identify as a first-generation college student?	Yes, I am a first-generation college student	No, I am not a first-generation college student
---	--	---

Class Standing (please circle):	First-Year	Sophomore	Junior	Senior	Grad Student
--	------------	-----------	--------	--------	--------------

APPENDIX C

Subjective Happiness Scale

Instructions: For each of the following statements and/or questions, please circle the point on the scale that you feel is more appropriate in describing you.										
1	<i>In general, I consider myself:</i>									
	not a very happy person	1	2	3	4	5	6	7	a very happy person	
2	<i>Compared to most of my peers, I consider myself:</i>									
	less happy	1	2	3	4	5	6	7	more happy	
3	<i>Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?</i>									
	not at all	1	2	3	4	5	6	7	a great deal	
4	<i>Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?</i>									
	not at all	1	2	3	4	5	6	7	a great deal	

APPENDIX D

Revised Sense of Belonging Scale

Instructions: For each of the following statements and/or questions, please circle the point on the scale that you feel is more appropriate in describing you.									
Completely Untrue 1		Mostly Untrue 2		Equally True & Untrue 3		Mostly True 4		Completely True 5	
1	<i>I have met with classmates outside of class to study for an exam</i>								
	completely untrue	1	2	3	4	5	completely true		
2	<i>If I miss class, I know students who I could get notes from</i>								
	completely untrue	1	2	3	4	5	completely true		
3	<i>I discuss events which happened outside of class with my classmates</i>								
	completely untrue	1	2	3	4	5	completely true		
4	<i>I have discussed personal matters with students who I met in class</i>								
	completely untrue	1	2	3	4	5	completely true		
5	<i>I could contact another student from class if I had a question</i>								
	completely untrue	1	2	3	4	5	completely true		
6	<i>Other students are helpful in reminding me when assignments are due or when tests are approaching</i>								
	completely untrue	1	2	3	4	5	completely true		
7	<i>I have developed personal relationships with other students in class</i>								
	completely untrue	1	2	3	4	5	completely true		
8	<i>I invite people I know from class to do things socially</i>								
	completely untrue	1	2	3	4	5	completely true		
9	<i>I feel comfortable contributing to class discussion</i>								
	completely untrue	1	2	3	4	5	completely true		
10	<i>I feel comfortable asking a question in class</i>								
	completely untrue	1	2	3	4	5	completely true		
11	<i>I feel comfortable volunteering ideas or opinions in class</i>								
	completely untrue	1	2	3	4	5	completely true		
12	<i>Speaking in class is easy because I feel comfortable</i>								
	completely untrue	1	2	3	4	5	completely true		

13	<i>It is difficult to meet other students in class</i>
	completely untrue 1 2 3 4 5 completely true
14	<i>No one in my classes knows anything personal about me</i>
	completely untrue 1 2 3 4 5 completely true
15	<i>I rarely talk to other students in my class</i>
	completely untrue 1 2 3 4 5 completely true
16	<i>I know very few people in my class</i>
	completely untrue 1 2 3 4 5 completely true
17	<i>I feel comfortable talking about a problem with faculty</i>
	completely untrue 1 2 3 4 5 completely true
18	<i>I feel comfortable asking a teacher for help if I do not understand course-related material</i>
	completely untrue 1 2 3 4 5 completely true
19	<i>I feel that a faculty member would be sensitive to my difficulties if I shared them</i>
	completely untrue 1 2 3 4 5 completely true
20	<i>I feel comfortable socializing with a faculty member outside of class</i>
	completely untrue 1 2 3 4 5 completely true
21	<i>I feel that a faculty member would be sympathetic if I was upset</i>
	completely untrue 1 2 3 4 5 completely true
22	<i>I feel that a faculty member would take the time to talk to me if I needed help</i>
	completely untrue 1 2 3 4 5 completely true
23	<i>If I had a reason, I would feel comfortable seeking help from a faculty member outside of class time (office hours, etc.)</i>
	completely untrue 1 2 3 4 5 completely true
24	<i>I feel comfortable seeking help from a teacher before or after class</i>
	completely untrue 1 2 3 4 5 completely true
25	<i>I feel that a faculty member really tried to understand my problem when I talked about it</i>
	completely untrue 1 2 3 4 5 completely true
26	<i>I feel comfortable asking a teacher for help with a personal problem</i>
	completely untrue 1 2 3 4 5 completely true

APPENDIX E

Self-Efficacy Questionnaire

Instructions: For each of the following statements and/or questions, please circle the point on the scale that you feel is more appropriate in describing you.						
1	<i>I can learn what is being taught in class this year</i>					
	not very like me 1 2 3 4 5 very like me					
2	<i>I can figure out anything if I try hard enough</i>					
	not very like me 1 2 3 4 5 very like me					
3	<i>If I practiced every day, I could develop just about any skill</i>					
	not very like me 1 2 3 4 5 very like me					
4	<i>Once I've decided to accomplish something that's important to me, I keep trying to accomplish it, even if it is harder than I thought</i>					
	not very like me 1 2 3 4 5 very like me					
5	<i>I am confident that I will achieve the goals that I set for myself</i>					
	not very like me 1 2 3 4 5 very like me					
6	<i>When I'm struggling to accomplish something difficult, I focus on my progress instead of feeling discouraged</i>					
	not very like me 1 2 3 4 5 very like me					
7	<i>I will succeed in whatever career path I choose</i>					
	not very like me 1 2 3 4 5 very like me					
8	<i>I will succeed in whatever college major I choose</i>					
	not very like me 1 2 3 4 5 very like me					
9	I believe hard work pays off					
	not very like me 1 2 3 4 5 very like me					
10	<i>My ability grows with effort</i>					
	not very like me 1 2 3 4 5 very like me					
11	<i>I believe that the brain can be developed like a muscle</i>					
	not very like me 1 2 3 4 5 very like me					
12	<i>I think that no matter who you are, you can significantly change your level of talent</i>					
	not very like me 1 2 3 4 5 very like me					
13	<i>I can change my basic level of ability considerably</i>					
	not very like me 1 2 3 4 5 very like me					

APPENDIX F

12-Item Grit Scale

Instructions: For each of the following statements and/or questions, please circle the point on the scale that you feel is more appropriate in describing you.						
Very much like me Mostly like me Somewhat like me Not much like me Not like me at all 1 2 3 4 5						
1	<i>I have overcome setbacks to conquer an important challenge</i> very much like me 1 2 3 4 5 not like me at all					
2	<i>New ideas and projects sometimes distract me from previous ones</i> very much like me 1 2 3 4 5 not like me at all					
3	<i>My interests change from year to year</i> very much like me 1 2 3 4 5 not like me at all					
4	<i>Setbacks don't discourage me</i> very much like me 1 2 3 4 5 not like me at all					
5	<i>I have been obsessed with a certain idea or projects for a short time but later lost interest</i> very much like me 1 2 3 4 5 not like me at all					
6	<i>I am a very hard worker</i> very much like me 1 2 3 4 5 not like me at all					
7	<i>I often set a goal but later choose to pursue a different one</i> very much like me 1 2 3 4 5 not like me at all					
8	<i>I have difficulty maintaining my focus on projects that take more than a few months to complete</i> very much like me 1 2 3 4 5 not like me at all					
9	<i>I finish whatever I begin</i> very much like me 1 2 3 4 5 not like me at all					
10	<i>I have achieved a goal that took years of work</i> very much like me 1 2 3 4 5 not like me at all					
11	<i>I become interested in new pursuits every few months</i> very much like me 1 2 3 4 5 not like me at all					
12	<i>I am diligent</i> very much like me 1 2 3 4 5 not like me at all					

APPENDIX G

Resilience Scale

Instructions: For each of the following statements and/or questions, please circle the point on the scale that you feel is more appropriate in describing you.											
Strongly Disagree			Neither Agree Nor Disagree				Strongly Agree				
1 2 3			4 5 6				7				
1	<i>When I make plans, I follow through with them</i>										
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree		
2	<i>I usually manage one way or another</i>										
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree		
3	<i>I am able to depend on myself more than anyone else</i>										
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree		
4	<i>Keeping interested in things is important to me</i>										
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree		
5	<i>I can be my own person if I have to</i>										
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree		
6	<i>I feel proud that I have accomplished things in life</i>										
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree		
7	<i>I usually take things in stride</i>										
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree		
8	<i>I am friends with myself</i>										
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree		
9	<i>I feel that I can handle many things at a time</i>										
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree		
10	<i>I am determined</i>										
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree		
11	<i>I seldom wonder what the point of it all is</i>										
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree		
12	<i>I take things one day at a time</i>										
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree		
13	<i>I can get through difficult times because I've experienced difficulty before</i>										
	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree		

14	<i>I have self-discipline</i>	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
15	<i>I keep interested in things</i>	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
16	<i>I can usually find something to laugh about</i>	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
17	<i>My belief in myself gets me through hard times</i>	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
18	<i>In an emergency, I'm someone people can generally rely on</i>	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
19	<i>I can usually look at a situation in a number of ways</i>	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
20	<i>Sometimes I make myself do things whether I want to or not</i>	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
21	<i>My life has meaning</i>	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
22	<i>I do not dwell on things that I can't do anything about</i>	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
23	<i>When I'm in a difficult situation, I can usually find my way out of it</i>	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
24	<i>I have enough energy to do what I have to do</i>	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
25	<i>It's okay if there are people who don't like me</i>	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree

APPENDIX H

Modified Stressor Scale for College Students

Instructions: For each of the following statements and/or questions, please place a check mark in the box marked “agree” or “disagree”, based on whether or not you believe the statement applies to you.		Agree	Disagree
1	<i>There are troubles in my family</i>		
2	<i>My family oppose what I want to do</i>		
3	<i>My family cannot convince me of their views</i>		
4	<i>I cannot accept the opinions of my family</i>		
5	<i>I cannot tell my parents what I really want to tell them</i>		
6	<i>I sense my parents' hopes for me</i>		
7	<i>The rules that my parents set (e.g.: curfew) are strict</i>		
8	<i>My parents are inquisitive about what I am doing</i>		
9	<i>My parents interfere in what I am doing</i>		
10	<i>My parents unilaterally ask or order me to do things</i>		
11	<i>I have little to talk about with my friends</i>		
12	<i>I am concerned about my friends' evaluations of me</i>		
13	<i>My friends cannot convince me of their views</i>		
14	<i>I cannot help always being good to my friends</i>		
15	<i>I have few friends</i>		
16	<i>I have difficulty getting along with my friends</i>		
17	<i>I cannot tell my friends what I really want to tell them</i>		
18	<i>I cannot help comparing myself with my friends</i>		
19	<i>My friends misunderstand me</i>		
20	<i>I have trouble with my friends</i>		
21	<i>I find it difficult to be frank with my friends</i>		
22	<i>I have to attend a lot of classes</i>		
23	<i>I am annoyed with some of my teachers</i>		
24	<i>I am pressed for time</i>		
25	<i>I feel busy with my classes, homework, and exams</i>		
26	<i>It is difficult for me to understand the topic I am studying</i>		
27	<i>Every day I have a lot of things that must be done a certain way</i>		
28	<i>I have little interest in studying</i>		
29	<i>Facilities are poor in my university</i>		
30	<i>My life prospects are uncertain</i>		
31	<i>My university life is different from what I imagined</i>		
32	<i>I have no idea why I am studying here</i>		
33	<i>My life is monotonous</i>		
34	<i>I have lost confidence regarding what I want to do in the future</i>		
35	<i>I find it difficult to talk to my teachers & university staff</i>		
36	<i>I am bored with my job(s)</i>		
37	<i>I spend a lot of time working at my job(s)</i>		
38	<i>I have trouble with others at my job(s)</i>		
39	<i>I am bored with my extracurricular activities</i>		
40	<i>I spend a lot of time doing extracurricular activities</i>		
41	<i>I have trouble with others at my extracurricular activities</i>		